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BUSINESS

The MAGAZINE of WALL STREET

and BUSINESS ANALYST

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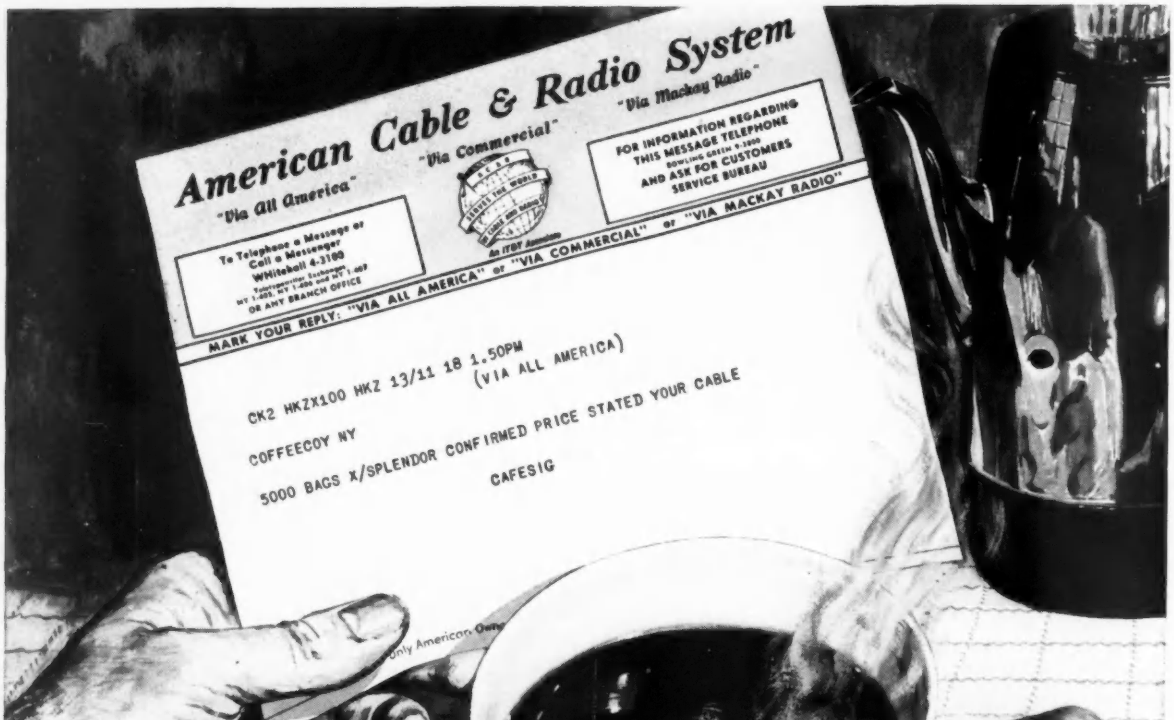
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Cover Photo — Courtesy of General Electric Company
Dual-cycle boiling water reactor for use at Commonwealth Edison Company's nuclear power station.
Photo page 333 — Courtesy of General Dynamics Corporation

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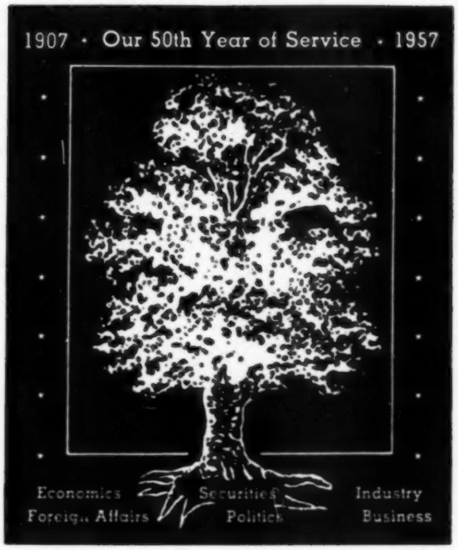
THE MAGAZINE OF WALL STREET

C. G. Wyckoff, *Editor-Publisher*



The Trend of Events

NEW STRAINS IN ANGLO-AMERICAN RELATIONS . . . Great Britain's unilateral action of drastically reducing her trade restrictions with Communist China will add further fuel to the Anglo-American differences that began with the Suez Canal fiasco.

Aside from the dubious integrity of abrogating an agreement with the U. S. and flouting the United Nations resolution of 1951 calling for trade restrictions with China, we can't help wondering what Britain hopes to gain by waving this red flag before our faces.

True, she has been on record as disagreeing with the restrictions, and reportedly tried hard to influence the U. S. to change its position in Washington conferences a year ago and again at Bermuda recently, but she has also consistently maintained that the embargo is ineffective since any restricted materials that China cannot buy herself, can be purchased through Russia. If this be the case, then why the slap at us. A British source is quoted as being hopeful that Britain's $28 million in exports to China can be doubled by this move, but independent observers, aware that Russia has been trans-shipping these same goods to China, cannot see the logic of the statement.

It seems to us that the net result will be an insignificant increase in Britain's trade with China, but an increase for Japan, West Germany, France and Italy, who will have no choice but to follow suit – and mounting resentment in the United States against Great Britain.

If Britain is not to benefit exceptionally from the shipment of an additional 200 items to China, the only other reasons for the move seems to be an attempt to reassert her control over her own foreign policy. MacMillan has every right to conduct foreign policy in the best interests of Great Britain but we seriously question whether antagonizing the U. S. for doubtful trade advantages is truly in her best interests.

LABOR LEADERS DON'T MIND INFLATION . . . Organized Labor is Hell-bent for inflation, with every major union labor leader clamoring for every penny of spending contemplated in the budget—and more—and with scornful rejection of President Eisenhower's plea for moderation in upward wage adjustment.

John L. Lewis says the White House is handing out "inordinate guff" when it says there must be a slowdown or halt on wage boosts.

Walter Reuther says: "We will go to the bargaining table in 1958 stronger than we have ever been. I think we will go there better prepared than we have ever been." He was talking about aircraft workers.

Reuther added: "North American, Douglas, Curtiss-Wright, Martin, or any of the others, are essentially like General Motors, Ford, or Chrysler. They aren't moved by the soundness of the demands or their justice. You can marshall your economic facts but unless you support them by the power, the will,

We call the attention of the reader to our Trend Forecaster, which appears as a regular feature of the Business Analyst. This department presents a valuable market analysis of importance to investors and business men. To keep abreast of the forces that may shape tomorrow's markets, don't miss this regular feature.

and the dedication of a fully-mobilized membership, you will not make an impression on the corporation's attitude."

If anything, the President's plea for moderation seems to have served to start the new wage round ahead of schedule. And the White House appears to be backing down. Ike first said, if business and labor do not assume some of the responsibility for holding the line, "The United States then has to move in more firmly with so-called controls of some kind." That kind of talk isn't heard anymore.

AFL-CIO says: "The huge budget, it is argued, will aggravate inflation. But this is a phony argument. Reduced taxes would be very welcome. But more welcome would be reduced slums and school shortages, reduced threat of war and Communist aggression."

Labor is on record for more defense, more foreign aid, more pay raises.

Organized Labor will be tougher than ever at the aircraft industry bargaining table. "When the crisis in the world is sharp and deep and threatening, then the aircraft industry is booming, the government is pumping appropriations, demand is great, employment is high . . . yet just when your economic power is at its maximum at the bargaining table, the pressures against you in the exercise of that power also are at their peak." This was another Reuther battle-cry.

It might be interesting to find what industry-wide contracts are opening up, what demands will be made (if they have been formulated).

Ike once considered it of the essence that no general round of wage boosts be started. That's undoubtedly still true. Against that accepted fact, Labor is organizing its demands. Appropriations for defense and for public works which cannot budget future wage increases, will therefore be unrealistic before the bills are signed.

The question seems to be DOES LABOR *WANT* INFLATION? The answer seems to be yes. And Labor is willing to go along with the highest budget in history for the temporary gain.

LACK OF NATURAL RESOURCES—BOSH! . . . Ever since the Paley Commission report a few years ago, we have heard recurrent wails of woe that the enormous appetite of our industrial machinery will soon turn us into a "have not" natural resources nation. The prophets of doom have been quick to point to rising oil imports, government stockpiling programs, and barter agreements swapping American agricultural surpluses for foreign strategic minerals, as first hand evidence of the decline in our natural wealth.

Obviously our gigantic industrial capacity consumes materials at a prodigious rate, and many of our cheaper natural resource deposits have been partially depleted. But actually this country is loaded with untapped wealth—much of it already located—which awaits only cheap enough production methods to put it to use.

Take our oil reserves, as an example: There are enough known deposits to at least equal all of the oil already taken from the ground since production began in this country. True, offshore oil drilling presents problems—but they are being licked—the enormous shale deposits in Colorado, estimated to contain 1,000 billion barrels of oil, have been an enigma—but they are being tackled with encouraging success by Union Oil Co. of California and the Sinclair Oil Company—and there still remain vast stores of unrecovered oil in our known oil fields that have not yet been tapped because they defy ordinary methods.

Just a week or so ago, Gulf Oil Corporation added three new multi-million dollar laboratories to its impressive research facilities that will spearhead the exploration of new concepts in oil production, improvement of fuels, and the application of nuclear energy to the oil industry. At the dedication of the new facilities, Gulf demonstrated a new and promising method for recovering the thick, semi-fluid deposits that abound in California and in some parts of Canada, and have so far defied the efforts of the drillers to bring them to the surface. The California deposits have been only about 10% recovered, but under the new process of burning part of the oil in the ground and using the heat to melt the thick deposits, recovery of 85-90% may be possible from these vast storehouses.

There are parallels in virtually every other extractive industry. Taconite has proved a promising source of iron now that the high grade ore of the rich Mesabi range has been seriously depleted. Costs have come down enough to allow commercial utilization of the new ore source. Copper companies, too, are meeting with success in exploiting lower grade ore deposits. Some formerly uneconomic sulphur resources are now usable because of a pelletizing process, radically reducing transportation costs—and the paper industry has taken a giant conservation step forward with the development of methods for using a waste material—wood chips—as a raw material for pulp. Furthermore, the rapid development of new, man-made materials that can substitute for natural products, give promise of additional successes.

American industry is accepting the challenge, and we won't sell its ingenuity short. We prefer to place our faith in their success— they will prove that we are still sitting on a tremendous heap of natural wealth.

MELOUZA — A NEW LIDICE . . . During World War II Nazi degradation sank to its lowest depths with the massacre of the population of Lidice, Czechoslovakia. The United Nations has since declared such acts crimes against mankind, but last week all 275 men and boys of Melouza, an Algerian village, were slaughtered before the eyes of their wives and mothers as the outcome of a factional dispute between rival nationalist forces. The people of France with the memory of Nazi atrocities still burning hot have been aroused to a state of indignation over the massacre. With the French government facing a decision as to whether an all out fight should be waged to retain Algeria, or to give it up as a lost cause, an incident of this kind may tip the scales—and outweigh more logical considerations.

France is now at the crossroads in its steps toward a solution to its North African dilemma—a factor that will be pointed up sharply in our authoritative article on France in the next issue which will cover all the significant political, financial and economic elements in her national picture. —END

BUSINESS, FINANCIAL *and* INVESTMENT COUNSELLORS::1907—*"Over Forty-nine Years of Service"*—1957

As I See It!

By JAMES J. BUTLER

INITIAL DECLINE IN DEFENSE ISSUES OVERDONE?

The current budgetary situation in Congress and the developing disarmament talks *have no* immediate impact on aircraft company earnings. They could affect earnings only mildly, if at all, for the rest of the calendar year. After that, Pentagon decisions, and psychological reactions—largely the latter—will move in and make their imprint.

If the originally projected cut of $2.5 billion had been made in the Department of Defense budget, and if the entire saving were to be at the expense of the aircraft-missile program, it still could not have materially touched procurement or delivery for a long time to come.

The "carryover" of funds for planes and missiles cannot be fixed with exactness because it is a fluid thing. But Pentagon and industry sources agree it is about $40 billion! Some of the funds are obligated, some are allocated, and some remain on the books ready for tapping, but whichever the category it adds up to money for air arms procurement. And the total will be recognized as several billions of dollars more than the entire amount in the pending defense budget.

Mutual embarrassment

The B-52 program at Boeing is not expected to be completed within three years. Certainly Boeing has no crucial problem. That program at first contemplated delivery of 15 craft a month. Under the whiplash of Stuart Symington the goal was made 20 a month, then it dropped back to the original 15. Actually, the 20-goal had not been achieved so it was a matter of projection, not production, at best. Boeing additionally will be up to its corporate ears in the job of turning out "707" commercial jet airliners. Lockheed's F-104A contract was switched to Convair, but nobody in Washington expects Lockheed to spend anxious waiting moments before hearing from Charles E. Wilson's men.

There is an element in the business of plane production which, given its true weight, helps get the scales into comfortable balance. The Pentagon attitude toward the commercial aviation companies is one of such complete dependence that no established company may be permitted to suffer. It is not a matter of creating work, but of profiting by lessons such as the one learned when the Korean War developed. After World War 2, the Government cancelled plane contracts, right and left. Some firms, especially those on the West Coast, began planning and tooling, to go into automobile production or other feasible lines. But when Korea broke loose there was a scramble back to aviation production. The cost ran high and the job was not an easy one. As a matter of national policy, that will not happen again. When there has been a shift from one model to another or a change in the rate of procurement in the past several years there have been compensating new contracts. When a company shows signs of weakening on military production readiness, the Pentagon moves in. Witness the flow of orders to Glenn L. Martin; the facility was too valuable to permit it to lose any of its military "look."

There is no reason to expect that present budget-cutting and new planning approaches will do violence to earnings. The money in the 1958 budget isn't likely to be allocated, let alone obligated, for at least one year. Money being paid to aircraft companies today was appropriated as much as three and four years ago.

Government agencies detest the term "carryover funds." Like the International Corporation Administration, they prefer to consider funds disposed of when contracted out. That clears the decks for new appropriations. So they are stacking up money; each year they go to Congress to talk about the ensuing year's needs. In the case of heavies like planes they're really talking about business to be completed two or three years thereafter, even if the business is to be "transacted" in the next fiscal year.

Nothing Congress could do with this year's budget could check the delivery and payment rate abruptly enough to lower earnings in this quarter, or, perhaps, in the next two. But a substantial budget cut this year could reduce backlogs next year and thereafter.

As for the disarmament talks, they are still in a formative stage with many obstacles to be hurdled. West German Chancellor Adenaur has asserted that anything more than a token disarmament agreement would have to await the (*Please turn to page* 380)

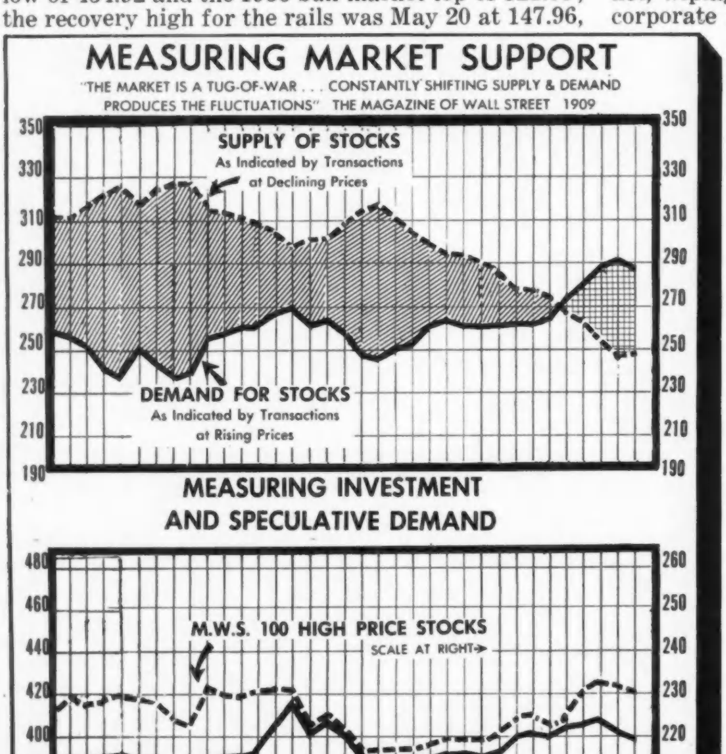
Special Situations Moving Market

It is uncertain whether the hoped-for business improvement will develop in the late 1957 months; and improbable, given an upturn, that it could be sharp enough to give much of a lift to earnings and dividends. Meanwhile, the creeping depreciation of the dollar continues and seems likely to go further. We look for a selective- trading-range market in nearby weeks.

By A. T. MILLER

During the last fortnight the market had its first sizable reaction since inception of the upswing from the February lows by the industrial and rail averages. However, it did no significant amount of damage and was largely made up late last week. Evidently investors remain generally more inclined to hold or buy stocks than to sell, as suggested by shrinkage of trading activity on market dips, expansion on strength.

The recovery highs to date were recorded May 21 by the industrial average at 506.04, against February low of 454.92 and the 1956 bull-market top of 521.05; the recovery high for the rails was May 20 at 147.96, up from February bottom of 139.23 but well dow from 1956 high of 181.23. The subsequent sell-o through May 28 cancelled about 16% of the prior ri by industrials and about 33% of that by rails. Thu rail action remains persistently inferior. Last week closing levels for these averages were 504.96 a 145.59, respectively.



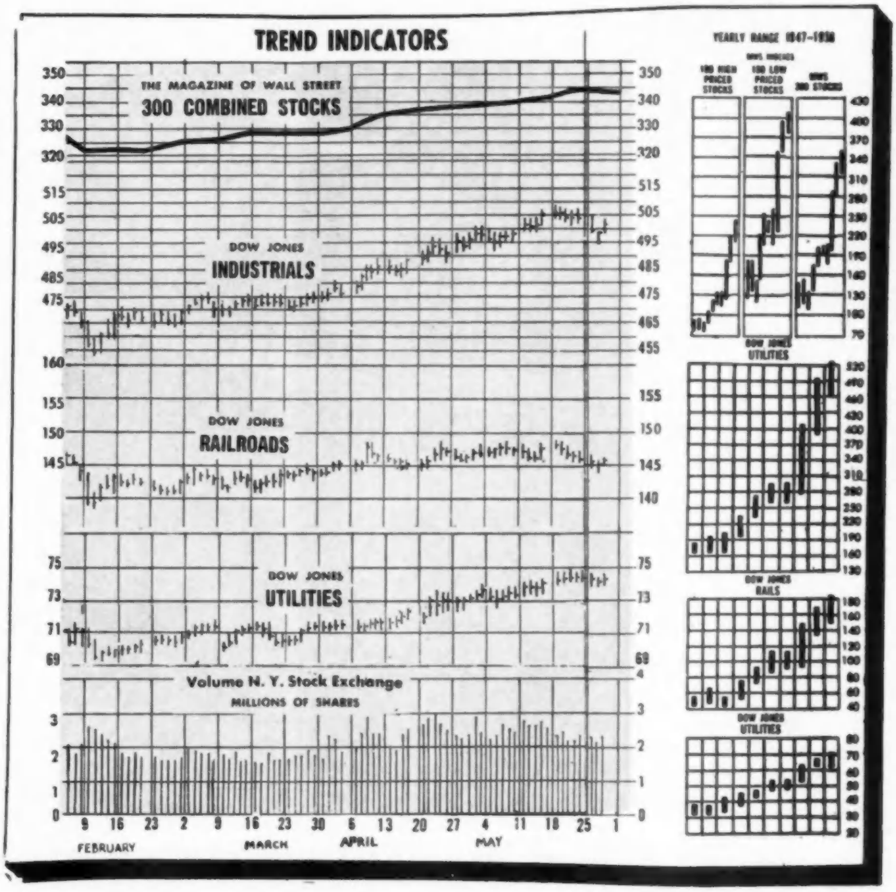
Utilities Holding Well

Despite recent further pressure on the bond ma ket, wiping out most of the earlier 1957 recovery corporate and Government obligations and pushi up yields of municipal bonds to the hig est level in about 22 years, the utili stock average stands close to its May bull-market high of 74.61, a subseque recession in four sessions having ca celled less than 6% of the rise from t October, 1956, low. The close last we was 74.03.

The behavior of individual stocks co tinues to be highly mixed, as has be so at all times heretofore both this ye and last. Thus, with industrials rallyi in last week's two final trading sessio about as many stocks eased or were u changed as showed daily gains, with t new 1957 highs and lows also close balanced. Renewed strength in oi touched off by news of a boost in t price of Middle-East crude oil, did mu to spark the turn around by the indu trial list starting in last week's pre-ho day Wednesday session. More importa than the direct benefit to internation oils, it narrows the gap between the U delivered price of Middle-East oil a that of domestic crude, thus maki maintenance of the latter price mo likely, despite some softening in U.S. o product prices since the re-opening the Suez Canal and despite more th ample U.S. refinery supplies.

We remain unable to see anything su ficiently bullish in the outlook for bu ness activity, corporate earnings a dividends to justify sustained mark

advance above present levels — nor anything sufficiently bearish to dictate a serious decline. If that is correct, it implies continuation of a selective trading range market within the limits marked out by the industrial and rail averages between August of last year and February of this year, at least until and unless business developments in the late 1957 months provide basis for significantly higher or lower investment hopes. At present the hopes, and the market, are quite high, compared with a few months ago, thus largely discounting a fairly good fourth quarter improvement in business. This argues that the upside potential in average stock prices should be restricted under any except strong boom conditions ahead, which seem unlikely; while, on the other hand, even moderately disappointing business trends next autumn could generate a sizable sell-off.



Pros And Cons In Business Picture

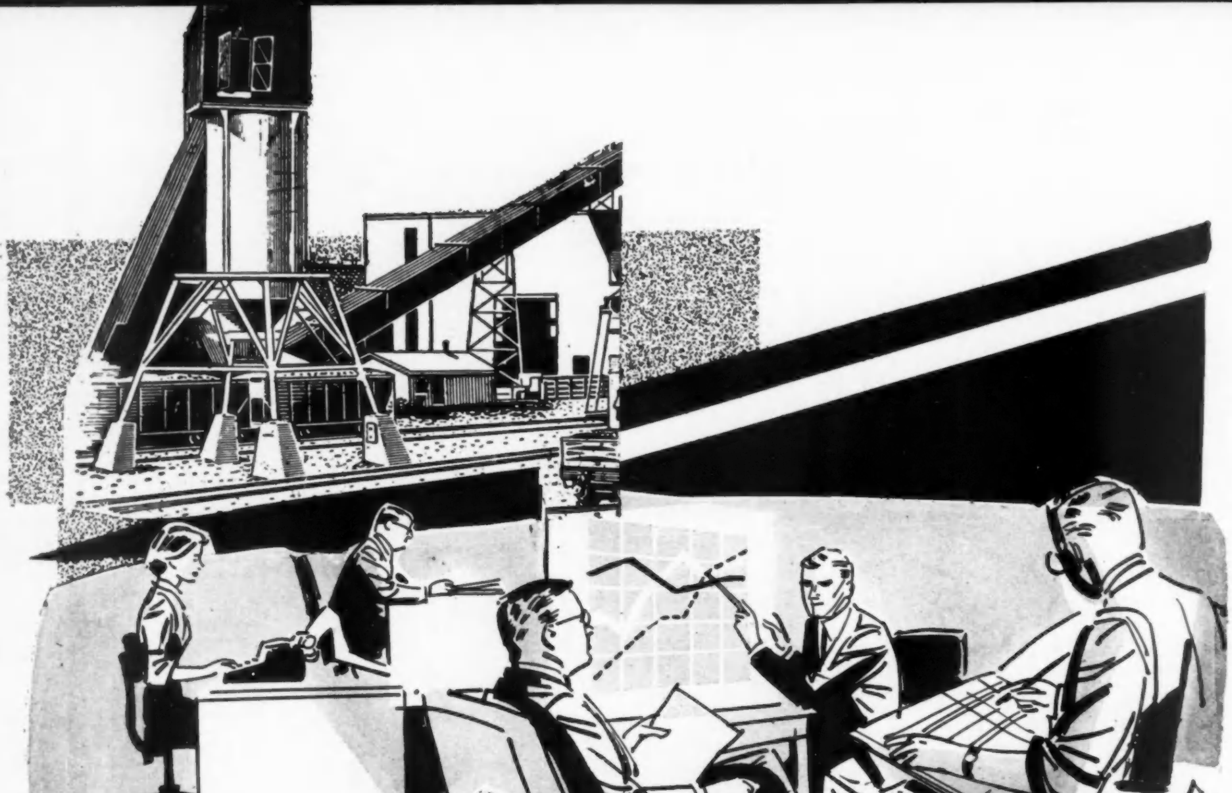
Principally due to mild easing in steel and automotive activity, and to reduced outputs of oil and copper, the Federal Reserve Board's adjusted index of production dipped to 145 in April from 146 in each of the first three 1957 months. This foots up so far to small fluctuation in an advanced area, since the peak level was 147 in December and the year-ago level 143. Based on recent reports of some further slippage in total new orders booked by manufacturing industries, and allowing for continuing efforts to hold down inventories, a mild further dip in the production index may well be reported for May and June. The year-to-year comparison is bound to be favorable in July and early August, since volume in this period was cut sharply by the steel strike a year ago. But that, of course, does not imply a favorable comparison with the recent level. We see no reason to think that third-quarter production will exceed the first-half average. It could be slightly lower, as things now look.

In such broad indicators as gross national product, personal income, consumption expenditures, and gross investment there has been no recession whatever, with all trending moderately upward through the first quarter and likely to do so through each 1957 quarter. Three key questions are inventories, total building outlays and outlays for new plant and equipment. The Department of Commerce figures show only a slow rate of rise in dollar value of inventories in recent months. It seems doubtful that physical volume of inventories at the year end will be significantly changed — which would rule out an inventory-generated recession for this year at least.

All surveys indicate maintenance of about the present level of total building outlays and expenditure for new plant and equipment through the rest of the year. That would mean no fourth-quarter upturn in these supports; and there will be shrinkage in them not greatly beyond the year end unless meanwhile we get a reversal of present downtrends in total building contract awards, heavy engineering contract awards and machine tool orders.

Regardless of cuts in new appropriations in Congress — some of which will probably be made up in 1958 deficiency appropriations—governmental spending (Federal, state and local) will surely be higher at the year end than now, and very likely higher in 1958. Modest gains in consumer income and spending are indicated, with purchasing power restricted to a slight increase by continuing inflation of living costs. Probably there are upturns ahead in 1958-model cars and in housing, but that would merely be some more "rolling adjustment" if dips come in plant outlays and non-residential buildings.

It is difficult to say to what extent the market is discounting hopes for "fairly good" 1957 earnings and dividends, to what extent it is allowing for continuing inflation. The former seem pretty well allowed for at the present level. The "creeping depreciation" of the dollar cannot be laughed off. It certainly is affecting long-term investment thinking on common stocks, but it can not argue for an uninterrupted rise. We believe realistic, selective investment policy is the right one. —MONDAY, JUNE 3.



AMERICAN INDUSTRY—*In Search of* NEW STIMULI *for 1958*

By HOWARD NICHOLSON

Ten years ago, the total output of the American economy amounted to abut $232 billion of goods and services a year. Today, the nation is producing at a rate of about $430 billion a year.

These bald figures are the two terminuses of a decade of business expansion virtually unequaled in American history. Subsumed in the total is a fantastic growth in American consumer demand; for durables, soft-goods, services, homes. But growth in government demand – for defense materials, roads, schools, water and transport facilities – has been of equal dimensions. And, more recently, the booms in these two sectors of the economy have been augmented by a new boom in the demands of business itself—for new plants, new machinery, new transportation equipment, new power equipment, new materials handling equipment.

Taken together, these demands added up to prodigious domestic boom. They were then ampli fied by a large and prosperous, if occasionall treacherous, export demand for American product Fed by these four channels, a swollen, inflationar stream of dollar demand for output has rolle through American industry for ten years, carryin even weak industrial situations along with it, an virtually eliminating the American business cycle During much of the period, business itself found th demands upon it in excess of its productive capacity only rarely, and in only very few industries at time, has there been a measurable excess of capa city. And for most of the period, shortages of skille labor have been much more prevalent than the fe

and scattered pockets of unemployment that have appeared momentarily here and there, to be quickly absorbed by the tremendous growth momentum of the economy as a whole.

With this record of growth behind it, it is hardly surprising that in the last few years business planners themselves have caught the fever. Since late 1954, the result has been a prodigious burst of business spending to raise its own capacity, to meet the apparently insatiable needs of the American economy in the present, and to prepare for what would appear to be an inevitable further expansion of demand in the future. In 1957, business is spending about 40% more for new capacity than it spent in 1954; almost double what it spent in the years immediately preceding the war in Korea. By all the available evidence, it is now raising its capacity to produce, at a fantastic rate.

Moreover, it is continuing to spend on new capacity at the highest rate in history, at a time when there is increasing evidence that the shortages of the past decade, and some of the major stimuli that produced the shortages, are becoming a thing of the past.

Conclusions on this subject need to be stated cautiously, and must above all avoid oversimplification. What is being discussed here is not the possibility of another substantial depression of the 1929 type. The evidence set forth below, in fact, does not even lead necessarily to the conclusion of recession at all. What is intended is to convey the opinion, now widely held among economists with excellent analytical records, that many of the strongest stimuli of the first postwar decade are on the wane, and will be present, if at all, in greatly reduced degree in the next several years. Those who hold this opinion go further: at the very time when these exhaustions are making their appearance and suggesting a reduction in the growth rate of demand, America's capacity to produce is in a dynamic upsurge. The latent potentialities are clear enough: if demand now were to flatten out and American capacity to produce continues to plunge ahead, American business will finally have restored to it the problems of chronic overcapacity which plagued it periodically in the years before the Great War. Those problems will return, that is, unless a new set of stimuli, equal to those of the immediate past, should appear to take their place, and maintain the headlong growth rate of demand. This is a race: between the capacity to produce, and the capacity to consume. What raises the subject now to a level of first importance in that capacity is, at the moment, clearly winning the race.

What's Happening to Demand?

Between 1947 and 1957, the most persistent and intense source of demand on America's capacity was the apparently inexhaustible determination of the American consumer to recover his prewar standard of living, and then to elevate it to an extraordinary new high exceeding anything ever known anywhere in the past. Fortunately, the consumer was in an ideal financial position to achieve this objective, and a free economy is ideally constructed to help him do it. With virtually no debt in 1947, and with a heavy supply of liquid assets accumulated during the war years, the typical American consumer rushed into the market place. He lived in the market place for almost ten years. He is now soberly returning home, much richer in tangibles, but with his negotiable wealth greatly reduced (in terms of purchasing power), and his debt ominously increased. He is, in a word, back at that historical, inevitable margin: he must live not on his assets, or on his capacity to bear addiitonal debt, but on his income.

Look first at the physical side of the personal balance sheet. Consumers now own twice as many automobiles as they owned in 1947. By all the available econometric evidence, consumers' ownership of passenger cars is now at least as high as would be indicated by their incomes, their family status, and the prices of automobiles themselves. Much the same might be said of homes: while the long secular drift of the American population into home-owner units from rental units will doubtless continue in the future, the general quality level of housing in the United States has been revolutionized in the past decade, when something like 12 million new homes have been built. One might go further along the list of durables: 75 million new refrigerators, perhaps 50 million television sets, etc., etc.

Of course the consumers' desires to improve living standards are doubtless inexhaustible. They nevertheless require financing to make them effective, and in the case of individual goods (such as automobiles) the desire grows less intense as the consumer's stock of each good rises. Financing further rapid growth in consumer living standards, at anything like the rate of the last decade, now seems seriously in question.

In 1947, for example, consumers owed a mere $6 billion in instalment debt. In leaps and bounds, personal instalment debt has climbed to about $31 billion—a five-fold increase, and about 10 times as rapid as the growth in after-tax personal incomes. There is hardly any question but what this growth has already diminished sharply; and there is a strong probability that it will diminish still further in the next three years.

The same question exists, although perhaps in less intense form, with respect to mortgage debt of individuals. This debt now totals well over $100 billion; it was roughly $25 billion in 1947. The increase in mortgage debt has been about eight times as rapid as the increase in disposable personal in-

Major Stimulants of the Postwar Decade

	1939	1947	Latest	% Increase 1947 to date
Passenger Car Registrations (units)	26,139,526	30,718,852	49,803,977	+ 62.1
		(Billions of Dollars)		
Instalment Credit Outstanding	4.5	6.7	31.3	+367.1
Government Spending-Total	13.3	28.6	79.8	+179.0
Defense	1.3	13.3	41.6	+212.8
State & Local	8.2	12.8	32.8	+156.3
Govt. Welfare Payments	3.0	11.8	18.7	+ 58.5
Business Spending for New Plant & Equipment	5.51	20.61	37.36	+ 81.3
Total Exports	3.2	15.3	21.6	+ 40.8
Money Supply	63.3	170.0	222.0	+ 30.6

comes. It too seems now to be slowing down.

Net debt creation on the part of the consumer has thus added about $100 billion to the demand for goods and services in the past decade. It is not likely to maintain anything like that pace in the foreseeable future. Accordingly, a major stimulus of the last ten years—a stimulus that did much to maintain business at capacity levels—will not be present in the next several years.

The Government Stimulus

It is customary today to think of government demand for goods and services to be in an uptrend. Doubtless such an uptrend exists. But it is important to note that the trend has existed ever since 1950 (with an important interruption in 1954, when the Korean war ended) and that spending was rising quite sharply even in the years 1947-1949, when defense spending was being reduced in the Truman budgets of those years.

In 1947, government – federal, state and local – spent about $29 billion. By the outset of the Korean war, the rate had risen to $40 billion; in 1956 it reached $80 billion.

It is altogether probable that government spending will continue to rise in the next several years, but it is quite clear that it is no longer doubling every six years. And it seems apparent that neither Washington nor the electorate wants it to rise at all. The main pressure for further rises now emanates from state and local governments, who foresee additional outlays for such institutional requirements as schoolrooms, roads, and other construction related to population growth. But population growth proceeds at perhaps 2% per annum, not 10%. Much more could doubtless be spent in these areas, but as with personal spending it has to be financed, and the electorate must want to finance it. There is plenty of evidence that viewed in this economic light (rather than in the sociologist's simple view of social need) spending by governments for institutional construction is not likely to soar in the future as it has in the past.

The Export Boom

In 1949, American exports averaged about $1 billion per month, or about twice the level of imports. In 1957, both of these figures seem well on the way to being doubled; exports are running close to $2 billion per month, and imports about $1 billion. The gap—the so-called merchandise export surplus—is now in the neighborhood of $10 billion a year.

This spreading gain of American exports has been achieved in spurts: every now and then the dollar reserves of the rest of the world have become so impaired by their purchases of American goods that the export rate has declined. The market is certainly there; but financing is likely to become increasingly difficult.

Moreover, the concept of the common market, in effect a program of tariff relaxation among nations entering into an area agreement, is now spreading rapidly throughout the world. Such area agreements have a number of important implications for the American economy; but one of the most important is that they may pose increasingly high *relative* tariff barriers to the entrance of American goods. To the extent that they do, of course, they will be putting a brake on a further source of eco-nomic energy that has been abundantly availabl in the past decade.

Money for the Boom

Underlying most of the exhaustions and near exhaustions described above, is the monetary situa-tion of the United States. In 1939, the U. S. pri-vately held money supply amounted to about $6 billion—about two-thirds of the value of nationa output. In 1947, money supply was about $160 bil-lion, or around 70% of national output. But sinc 1947, the rate of gain in money supply has slowe perceptibly while output has risen; currently, th relation of money supply to national production i lower than at any time since 1931.

The reason for this decline is multiple, and com-plicated. It is, in general, a reflection of anti-infla-tion policy, just as the tremendous growth of mone supply in earlier years was a reflection of wars Money is not itself a true economic stimulant; bu in the context of the last decade it has reinforce and effectuated other stimulants present in th economy. Its stability now is an indication that th pressure is out of the postwar boom. The 25% in-crease in money supply between 1949 and 195 (which reflected the Korean war) is not likely t be repeated in the next five years, unless a new wa intervenes.

Where From Here?

All of the foregoing suggests that in the year immediately ahead, the pressure on industrial ca-pacity will be considerably less than it has bee in the past decade. Are there any important offset to be expected, any new stimuli emerging tha will take the place of the gradual exhaustions ap-pearing now?

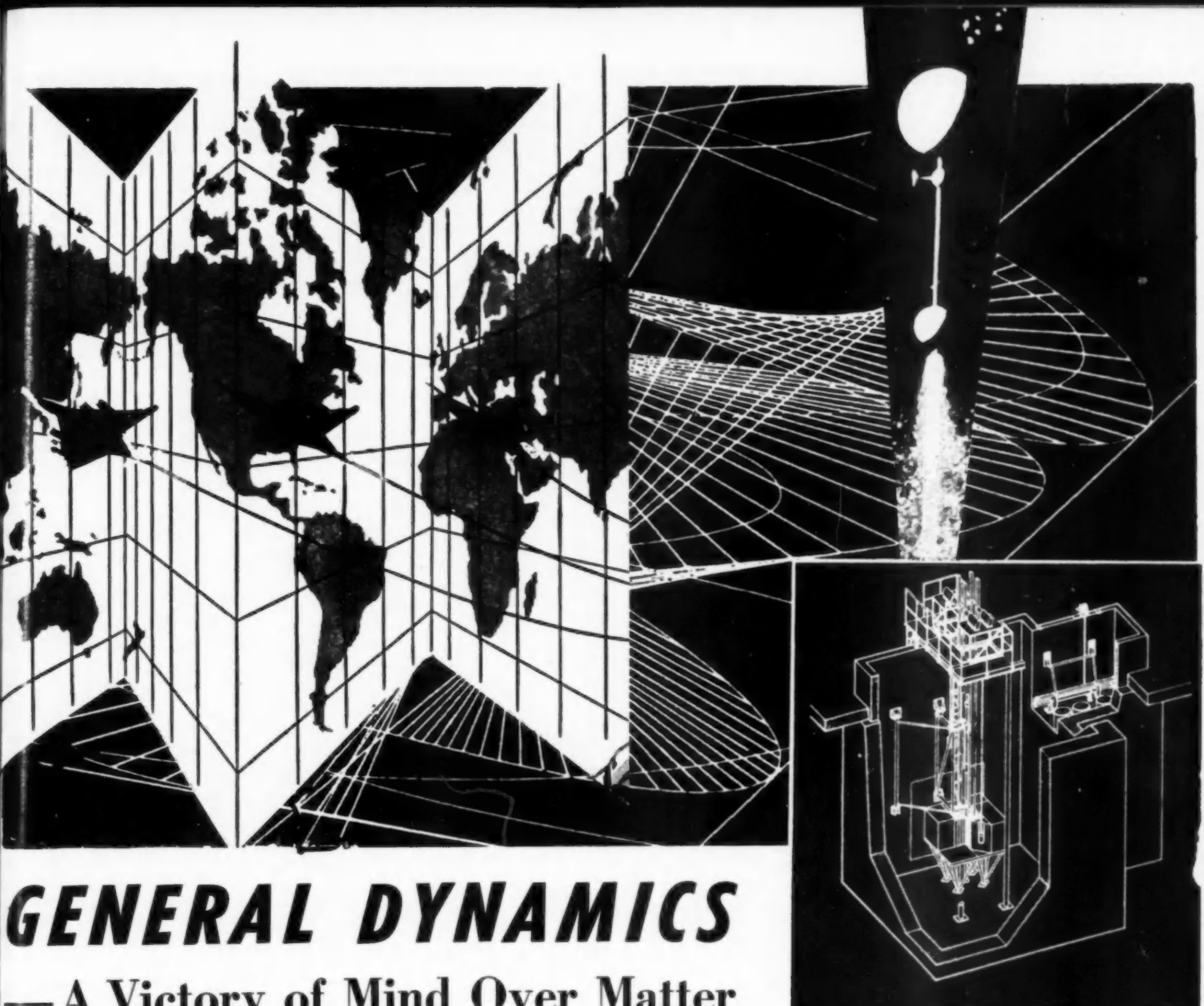
A number of possible stimuli exist. But they ar not automatically available. With one exception, a a group, their distinguishing feature is that the are *volitional;* they require a positive nationa awareness, and a national program to achieve them

Research and Obsolescence

It is hardly news that American business is toda engaged in the mightiest industrial research pro-gram in history. According to the best availabl estimates, business is spending close to $6 billion year in its laboratories, and will be spending $ billion a year by the end of this decade.

The stimulant possibilities of this torrent of re-search are, of course, immense. For research de-stroys while it creates. Atomic research, fo example, is now destroying some existing electrica utility equipment as effectively as though it wer being exploded by atomic bombs. Research in auto-mation is destroying the utility of existing machin-ery by devising new, much more efficient, lowe cost machinery. As the wave of research proceed it is likely to be accompanied by a following wav of demand for the machinery of the new technolog

However, this demand, to be effective, will hav to be met by the required funds. To create the fund and activate the demand, a major revision of th tax laws affecting depreciation deductions is re-quired. To free corporate (*Please turn to page* 378



GENERAL DYNAMICS

—A Victory of Mind Over Matter

By EDGAR T. MEAD, JR.

If an American corporation were said to possess a "conscience", General Dynamics could classify as an outstanding example. Shortly after World War II, when most industrial managers were bending efforts toward products for a peacetime economy, the men at General Dynamics foresaw a period of many years of international tension. At the same time, there was presented a glorious opportunity to transform an otherwise unglamorous company (Electric Boat) into a corporate enterprise with great sales and earnings possibilities. The justification for these beliefs may be found in the progress that has been made. From a mere $14.4 million in 1946, sales crossed the billion dollar mark in 1956, a brief ten years later. Net income skyrocketed from a million dollar level in 1946-47 to the reported $32 million last year.

In many a success story, the element of management has been the essential ingredient. In the saga of General Dynamics, the team had been led by the late John Jay Hopkins, a leader possessing brilliance, dedication and vision. Hopkins stated in the last Annual Report he was to sign, "Growth depends upon concentrating our gaze on the future, and not on the past, upon doing our own thinking, and upon having the courage to act on it". And certainly the past and present direction of the company can be summed up in these words.

The loss of John Jay Hopkins, who passed away on May 3, 1957, temporarily left a great gap. He has been succeeded by Frank Pace, Jr., 44 years of age, who was hand-picked by Hopkins after Pace resigned as Secretary of the Army in 1953. In the interim, Pace has had ample opportunity to absorb the challenging complexities of General Dynamics in the rank of Executive Vice-President. Other changes were made, and these must be discussed separately.

Where From Here?

The question in the minds of investors is whether General Dynamics can continue its remarkable pattern of growth in the future. What are the immediate

prospects? What new products are liable to improve sales volume? Is the present management likely to make a success comparable to that engineered by Hopkins? Is the common stock, which has increased nearly 400% in the past five years, statistically attractive at the current level of 59½ which reflects unsettlement due to disarmament talks and proposed cuts in the budget.

Backlog Pacing Sales

The backlog of orders at the end of the first 1957 quarter was a reported \$2.2 billion. This figure, which does not take into account so-called letters of intent for further contracts, is several millions of dollars higher than the backlog at the end of 1956, which itself was 36% higher than the \$1.6 billion backlog at the close of 1955. During the past several years, the reported backlog has steadily increased: faster, in fact, than sales volume. One explanation is that many of today's contracts are for highly engineered products which take a great length of time to design and produce. Just the same, higher backlogs are generally a cause for optimism.

First quarter sales were \$335 million, compared with \$173 million during the March 1956 quarter. The net income was \$8.8 million, equivalent to \$1.14 per share (7,723,964 shares) and indicative of a possible annual rate of \$4.50 per share. This estimate would represent, if attained, a gradual improvement over the 1956 earnings of \$3.85 per share and the \$2.82 per share in 1955. The outlook for the immediate future would therefore seem to inspire confidence. The offsetting factors are higher costs of labor and materials, and special charges arising from large scale capital projects in the various divisions.

Comparative Balance Sheet Items

ASSETS	December 31 1953	1956 (000 omitted)	Change
Cash & Marketable Securities	\$14,664	\$ 39,053	+\$ 24,389
Receivables, Net	13,580	48,507	+ 34,927
Unreimbursed Expend. on Contracts	13,632	121,969	+ 108,337
Inventories	6,635	158,459	+ 151,824
Prepayments	1,239	4,327	+ 3,088
TOTAL CURRENT ASSETS	49,750	372,315	+ 322,565
Net Property	7,110	56,983	+ 49,873
Miscell. Invest. & Receiv.	....	5,275	+ 5,275
Invest. in Consol. Vultee Airc.	9,525	....	— 9,525
TOTAL ASSETS	\$66,385	\$434,573	+\$368,188
LIABILITIES			
Notes Payable	\$ 870	\$ 10,000	+\$ 9,130
Accounts Payable	12,471	126,432	+ 113,961
Accruals	5,007	67,184	+ 62,177
Tax Reserve	5,018	32,246	+ 27,228
Dividends Payable	709	3,862	+ 3,153
TOTAL CURRENT LIABILITIES	24,075	239,724	+ 215,649
Minority Interest	395	574	+ 179
Long Term Debt	10,731	52,128	+ 41,397
Preferred Stock	7,874	....	— 7,874
Common Stock	2,523	7,724	+ 5,201
Surplus	20,787	134,423	+ 113,636
TOTAL LIABILITIES	\$66,385	\$434,573	+\$368,188
WORKING CAPITAL	\$25,675	\$132,591	+\$106,916
CURRENT RATIIO	2.0	1.5	— 5

Pulse-Taking While An Empire Grows

The story that led to giant-sized sales and hearty profits is one of the most enthralling to be encountered in the history of modern American business enterprise. Starting with a slow-moving ship building company, General Dynamics emerged as a prince of industry in a number of important fields. In a brief five years, from 1952 to 1956, sales soared almost 700%. Net income increased almost as fast, improving by about 550%. Adjusting for splits, the common shares catapulted by about 430% in value.

There are a number of separate divisions, and the broad categories embrace aircraft, ship building, electronics and atomics. The largest single division is *Convair*, (formerly Consolidated Vultee), which was acquired by an exchange of stock in 1954. This move followed the successful 1947 purchase of *Canadair*, a major supplier of military and civilian aircraft in the Dominion of Canada.

An Empire Within An Empire

Convair is one of the best diversified of domestic American aircraft manufacturers. It owns plants in Texas and California, and service and test facilities are to be found in several other states. Convair products are well-known to the travelling public, to wit, the ubiquitous CV 240s and 340s for short to medium routes on 34 different airlines. Following the lead of the safe and economical 240s and 340s is the new 440 "Metropolitan", incorporating several innovations in design and accommodating a larger payload. About eight or nine per month are being constructed toward a total of 146 recently

Long Term Operating and Earnings Record

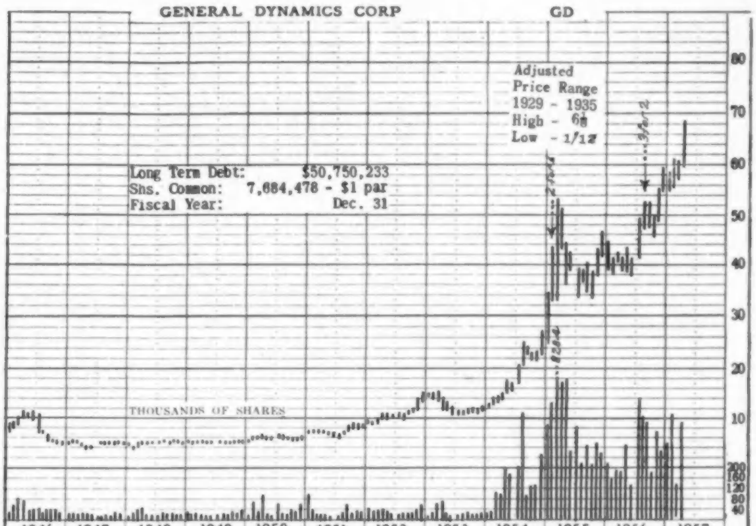
	Net Sales (Millions)	Operating Income (Millions)	Operating Margin	Income Taxes (Millions)	Net Income (Millions)	Net Profit Margin	Net Per Share	Div. Per Share	Percent Earned on Invested Capital	Price Range High Low
1957 (1st Quarter)	\$ 334.6	......	....	......	\$ 8.7	2.6%	\$1.44	\$1.00[1]	......	68⅝-54⅜[2]
1956	1,047.8	\$62.7	5.9%	\$31.8	31.9	3.0	4.14	1.60	22.4%	59⅝-37¾
1955	687.2	45.1	6.5	23.0	21.2	3.0	2.82	1.42	17.8	53¼-32
1954	648.6	44.5	6.8	23.1	20.8	3.2	3.15	1.08	23.4	56½-24
1953	206.6	12.8	6.1	6.4	6.2	3.0	2.34	.75	8.3	30⅝-20⅝
4 Year average 1953-1956	\$ 647.5	\$41.2	6.3%	\$21.0	\$20.0	3.0%	\$3.11	\$1.21	17.9%	68⅝-20⅝

[1]—To May 10, 1957. [2]—To May 17, 1957.

reported on order.

The jet age finds General Dynamics well prepared with its new civilian 880 Jet Transport, a 615 mile per hour luxury model, for which there are orders totalling $200 million.

Convair's military business is also well known and has been linked with the ultimate in speed and design. The unusual "Pogo Stick" plane was a Convair development, preceding by years the next model by a competitor. Convair makes a wide range of military planes, including the B-58 "Hustler", a supersonic jet bomber provided with the J79 engine. The deadly F102 and F106 interceptors are under contract for the Government in large volume. Convair's variety of production included two huge Navy flying boats last year, and a group of F86 "Sabrejets" are destined for shipment to the German Federal Republic.



	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	
	.66	.13	.83	.05	.51	1.51	1.91	2.34	3.15	2.82	4.14		EARN.
	*.41⅔	.33⅓	.50	.50	.41⅔	.66⅔	.75	.75	1.06⅓	1.43⅓	1.60		DIV.
	16.9	16.8	17.0	16.3	15.0	19.4	22.1	62.4	67.3	125.2	132.5	Mkt Cap $ Mil	

*Plus stock dividend.

Many Designs On The Future

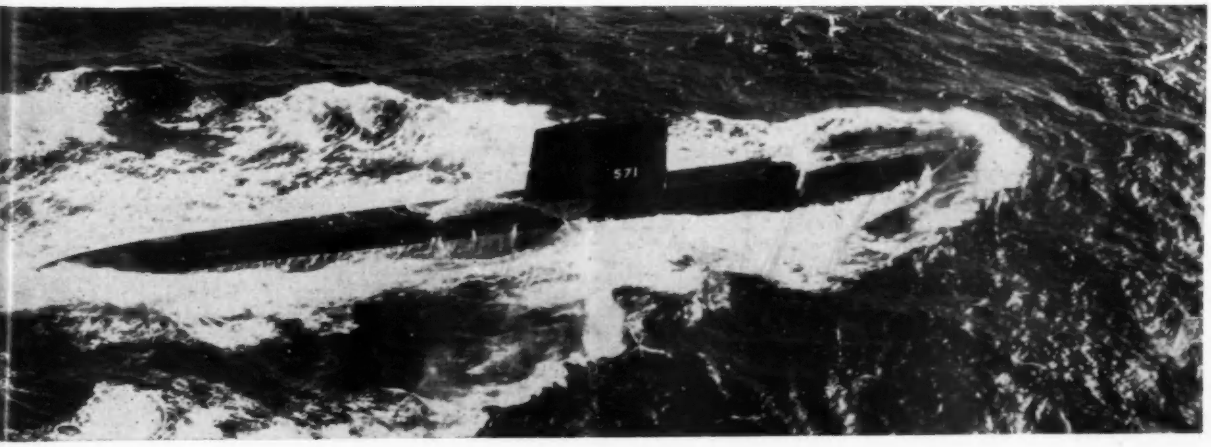
The Convair Division of General Dynamics is well advanced in the science of guided missiles and in the process of looking well ahead in the future, the company has experimented with nuclear energy for aircraft power. Last year, in fact, a small reactor was mounted in a large conventional craft and test flown while in operation. Although the reactor did not supply energy to the mother ship, the experiment provided important data on the behaviour of a reactor in flight.

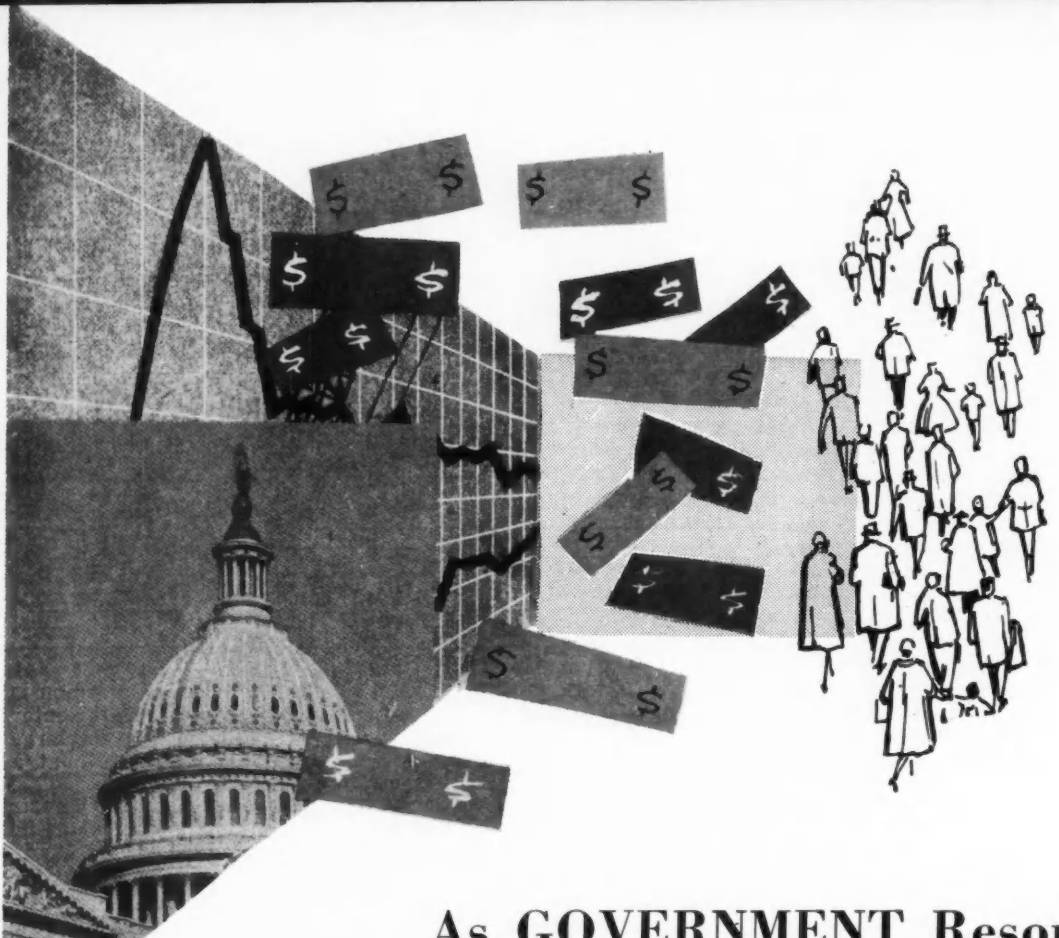
The important missiles associated with the Convair division are the "Terrier" and the "Atlas". The "Terrier" is a highly mobile surface-to-air missile, intended for use as a devastating weapon by land based artillery or seaborne Naval units. The "Atlas" is a new Intercontinental missile, large in size, and necessitating a highly engineered control system. The structure of the missile, owing to the supersonic speeds in contemplation, must be capable of withstanding extremely high temperatures. To date, the "Atlas" contract amounts to about $145 million. Several sites are given over to the building and testing of missiles, and a total of $40 million is budgeted toward a modern Astronautical Center near San Diego, California. Obviously, this large sum of money would not be expended without a larger missile program in view.

A great element of strength is that the Convair Division is adapted to serve either the "guns" or the "butter" side of the economy. If we are able to "win the peace" and more attention can be turned to world trade, then, doubtless, the commercial aircraft production could be large indeed. Meanwhile, the compromise is at least satisfactory from a sales viewpoint.

The Atomic Age

One of the challenging goals set by John Jay Hopkins was to create a company which would be "the General Motors of the Atomic Age". Even in today's quite preliminary stages of nuclear development, General Dynamics has won an important position through the *General Atomics Division.* By far the largest share of (*Please turn to page* 378)





As GOVERNMENT Resorts to FINANCING by EXPEDIENTS—

By MICHAEL STEPHEN

The biggest financial news story in years is the trouble the U. S. Treasury—the best credit risk in the world—is having selling its securities. Investors are increasingly reluctant to buy them, even though the Treasury is paying the highest interest rates in more than twenty-four years. To cope with the situation, the Treasury debt managers are violating rules for sound finance they themselves set up four years ago when they took office. Meanwhile the interest cost of carrying the $274 billion public debt is going up and up with no visible end in sight. All over the country—and abroad as well—people are watching anxiously, asking the reasons why and wondering where it will all come out.

The bare fact is that the Treasury is bearing the brunt of a stupendous demand for money, the like of which has not been seen for more than twenty years. This makes it hard to sell new securities and causes holders of old ones coming due to ask for cash at maturity. For example: the Treasury expected to pay out in cash maybe $400 million on a routine refunding operation in February; actually $875 million were turned in for cash. The situation worsened sharply in May when, with $4.2 bilion of its notes maturing, the Treasury had to pay off holders of a spectacular $1.2 billion or 28 per cent in cash. This was the highest percentage of cash redemptions on a Treasury refunding ever. It occurred even though the Treasury was offering in exchange the highest interest rates—3½ and 3⅝ per cent—since 1933.

Meanwhile, holders of the $55 billion Savings bonds outstanding are turning in their bonds for cash far faster than the Treasury can sell new ones. Even series E and H bonds—on which the rate was raised from 3 to 3½ per cent in April—show bigger redemptions than sales. But the big drain is on the series F and G Savings bonds—no longer on sale—where net redemptions have been running a startling $3 billion a year.

Another source of pressure is the International Monetary Fund, which has been cashing in some of its holding of U. S. Treasury notes to raise dollars for credits to member nations. Since last December when it advanced $561 million to Great Britain to stabilize the pound in the wake of the Suez crisis, redemptions of Treasury notes by the IMF total $1.1 billion.

To compound the Treasury's problem, the federal budget outlook has worsened since the President made his forecasts last January. Military spending has been running beyond all bounds despite Defense Secretary Wilson's best efforts. Tax receipts have tended to lag a little. The best guess now is that the budget will still show a surplus but probably closer to \$1 billion than the \$$1\frac{3}{4}$ billion the President predicted.

Raising New Money

The net result of all this has been to force the Treasury into the money market almost continuously. Enlarged weekly Treasury bill offerings—raising \$1.1 billion—covered the attrition on the February refunding. March brought in \$5.2 billion surplus revenues but \$4.2 billion were committed to retire tax anticipation obligations sold to cover cash needs in 1956. Thus, at the close of March the Treasury had to sell \$3.4 billion short-term certificates and notes to cover April and May deficits.

The \$1.2 billion attrition on the May refunding precipitated another crisis. Surplus June tax revenues could not be counted on for relief because the Treasury has \$4.7 billion June tax anticipation obligations to redeem. To meet its needs the Treasury turned once more to the Treasury bill market—the most inflationary form of finance—and on May 27 sold \$1.5 billion more tax anticipation bills designed to tap September surplus revenues. This obviously does little more than push the problem off for a few months. It also raises the total of Treasury bills outstanding—the nearest thing to cash—to a new peak of \$26.8 billion.

Meanwhile, Treasury plans to offset the heavy reliance on short-term financing with an issue of long term bonds in exchange for 1957 maturities of series F and G Savings bonds came to nothing. Treasury officials announced the indefinite postponement of the projected bond issue May 16 with: "The market is simply not receptive. That's all."

In plain language, the market would not take a long Treasury bond at a price the Treasury was willing to pay. And the Treasury was willing to pay a good price, $3\frac{1}{2}$ or even $3\frac{5}{8}$ per cent according to market professionals who participated in preliminary talks with Treasury debt managers. This would have been $\frac{1}{4}$ or $\frac{3}{8}$ per cent better than the Treasury paid on the 30-year $3\frac{1}{4}$s in the midst of the 1953 money squeeze.

Money Market Tight

The trouble is that the Treasury is trapped in the tightest money market since the banking crisis of 1933. Competing demands for funds from business, states and municipalities and home buyers have forced interest rates up to record levels. As debt manager W. Randolph Burgess, Under Secretary of the Treasury put it:

The great problem of debt management is prosperity. The demand for money is tremendous, so we've had to compete in the money market with business, states and municipalities, mortgages and almost every other form of borrower. This country has been trying to invest more money than it's been saving and that means tremendous pressure in the capital markets.

A glance at the competition explains why the Treasury is having trouble selling its securities at $3\frac{1}{2}$ or $3\frac{5}{8}$ per cent. Last month New York Telephone Company offered \$70 million Aaa-rated bonds priced to yield a juicy 4.40 per cent, highest since the early 1930's on bonds bearing the highest investment rating. Even so, the market showed no eagerness to snap the offering up and many of the bonds were on the bargain counter not long after. Other investment grade but less highly rated corporations are paying 5 per cent for long-term money.

Meanwhile, states and municipalities have had to offer the highest rates since the mid-1930's to sell their bonds. Good grade municipal issues have recently sold to yield as much as $4\frac{1}{2}$ per cent. Their legal exemption from federal income tax makes them specially attractive. A $4\frac{1}{2}$ per cent tax free yield is equivalent to 5.63 per cent on a taxable Treasury bond for a buyer in the initial 20 per cent tax bracket. For anyone earning enough taxable income to put him in the 50 per cent tax bracket, a Treasury bond would have to pay 9 per cent to be as attractive. A buyer paying the top tax rate of 91 per cent would have to get a fabulous 50 per cent on a Treasury bond to match a $4\frac{1}{2}$ per cent tax exempt yield.

The record rates reflect the excess of credit demand over supply. New corporate security issues in the first five months of 1957 are estimated at no less than \$5 billion, against \$4 billion in the comparable period of 1956, itself a record year. New state and municipal issues total \$3 billion against \$2.4 billion in the first five months of 1956. New housing starts are down from a year ago but with prices up and people buying bigger homes the mortgage market is still taking the lion's share of the savings flow.

Signs point to continued pressure in the capital markets. A recent Bankers Trust Company survey concluded:

". . . it is difficult to foresee any important easing of interest rates in the months ahead. Demands for investment funds are still pressing against a limited supply of savings, the financing calendar presages a reasonably large and continued flow of new offerings, business expectations are generally favorable and credit policy continues firm."

Meanwhile, the Federal Reserve money managers see no reason to ease the availability of credit so long as the economy rolls along full tilt, credit demands outpace the savings supply and prices continue their upward drift. Indeed, by stepping up the pressure on the reserve positions of the banks in recent weeks, the money managers have indicated that they are getting concerned about the increasingly bullish tone of business sentiment and the evidences of renewed speculative upsurge in the stock market.

The Failure of Debt Management

The Treasury's recent emphasis on the issue of Treasury bills, tax anticipation obligations and other short-dated debt has had an effect of keeping interest costs down. A more important reason for the concentration on short-term issues is the Treasury's anxiety to avoid competing for long-term funds with the home mortgage market, industry and states and local government. Whatever the justification, this course represents a reversal of the policy

laid down by President Eisenhower and Treasury Secretary Humphrey.

President Eisenhower in his first State of the Union Message in February 1953 said, in his discussion of fiscal policy, that "too great a part of the national debt comes due in too short a time." The President said that the Treasury would undertake at suitable times a program of extending part of the debt over longer periods and gradually placing greater amounts in the hands of longer term investors.

Our determination to do this at suitable times was based, of course, on the knowledge that too much short-term debt is inflationary. Handling of the debt by previous administrations had contributed substantially and deliberately to the inflation which robbed the dollar of almost half of its purchasing power from 1939 to January 1953.

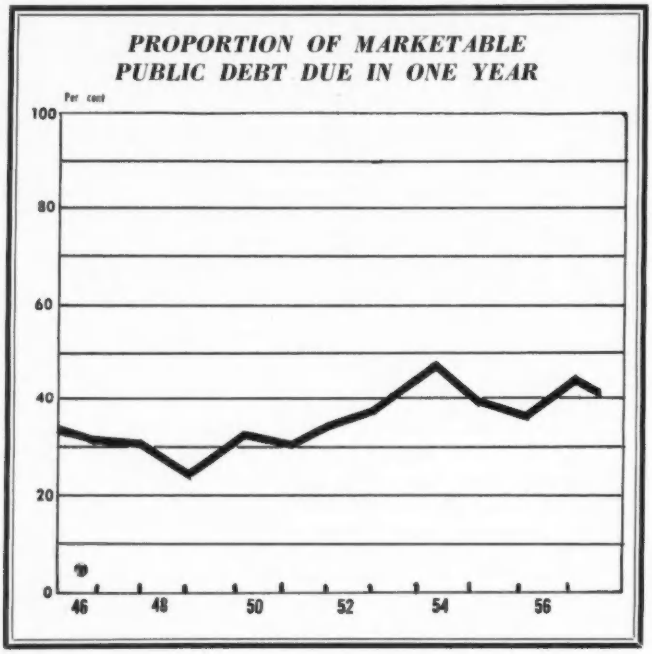
In January 1954 President Eisenhower pointed out that:

"Nearly three-quarters of the debt we inherited a year ago matures within less than 5 years or is redeemable at the holders option. Too large a proportion is in the hands of banks. This is the result of financing over a period of years too largely by short term issues at artificially low interest rates maintained by Federal Reserve support. These policies contributed to cheapening the dollar."

The Treasury followed a policy of lengthening the debt at every suitable opportunity in 1953 and in 1955 issued the 40-year 3 per cent bonds. But since July 1955 debt lengthening has been practically nonexistent.

The result is that all of the ground gained in 1953-55 has been lost. The proportion of the debt due within five years has grown from the nearly three-quarters mentioned by the President to around four-fifths at the close of May 1957, including about $55 billion nonmarketable Savings bonds redeemable on demand.

The marketable debt, which the Treasury directly influences by its choices of new money and refunding offerings, shows no better record. Marketable Treasury bills, certificates, notes and bonds due within one year—the so called floating debt—have risen from $56.9 billion in December 1952, just before President Eisenhower took office, to $65.9 billion on May 31, 1957. As the accompanying chart shows, fully 41 per cent of the marketable debt was due within a year on May 31, against 38 per cent in December 1952. In December 1946 when war finance was completed, the percentage of the marketable debt due within a year was less than 31 per cent.



PROPORTION OF MARKETABLE PUBLIC DEBT DUE IN ONE YEAR

With all of this, the average maturity of the marketable debt—weighting the amount of each issue outstanding by the number of months to final maturity—is actually lower now than it was when the Eisenhower administration began its debt lengthening program—four years and nine months at the close of May against five years and four months in December 1952.

This means more than a failure of debt managers to reach their goals. The plentitude of short-dated Treasury debt now outstanding is one reason prices have been rising over the last two years. Short-term Treasury securities are the nearest thing to money there is. Large outstanding amounts of them enable the economy to escape the effects of restrictive Federal Reserve credit policies: people wanting to lend or use money beyond the limits of their immediate resources simply let holdings of short-term Treasury securities mature and get the necessary cash that way.

At the same time, the concentration of the debt in near-dated maturities insures a rapid flow of new financing problems. One certainty, therefore is that the Treasury debt managers will stay on the griddle in the foreseeable future. The Treasury's best brains will still be wrestling with the problem of financing at reasonable inest rates in unfavorable markets.

The U. S. Versus the Canadian Dollar

Along with the troubles of the Treasury, one of the most remarkable developments in the financial markets has been the strength of the Canadian dollar which rose to $1.04⅞ in May, its highest level since November 1933. Some fearful U. S. investors have emphasized the other side of this comparison: that the U. S. dollar is worth only $0.95⅛ in terms of the Canadian dollar. A few are even concerned that our big debt, the troubles the Treasury is having in refinancing it, and the danger that the budget is getting out of hand are leading to a flight from the dollar.

This is wide of the mark. The answer is not a flight from the U. S. dollar but a surge toward temptingly profitable investments in rapidly growing Canada where oil, iron ore and the development of manufacturing industry offer glowing prospects for equity capital. At the same time, the pace of investment in Canada is so rapid that borrowed money commands interest rates well beyond those prevailing in the U. S. market. For example: where the U. S. Treasury recently (*Please turn to page* 374)

Coming MERGERS *in the* MOVIES

By JOHN WINGATE

Hollywood, no stranger to the superlative, is in the midst of reorganizational extravaganzas—colossal counterattacks on the impact of television—and seems to be setting production schedules for a stupendous love story that may have a surprise ending in the corporate marriage of some of the industry's giants. Spyros P. Skouras may have tipped the plot when he admitted at the recent Twentieth Century-Fox annual meeting that "negotiations" were being conducted toward the possibility of combining production operations with the Metro-Goldwyn-Mayer studios of Loew's, Inc.

The logic of mergers in an industry plagued by high salaries, years of living "high on the hog", massive duplication of facilities and excessive inefficiency, appears as inescapable as the—"if you can't lick 'em, join 'em"—approach the industry has adopted to counter the inroads made by television, the *enfant terrible* of the entertainment field. When television became the new great American pastime the motion picture industry was driven to the wall as it tried to continue doing business at the same old stand. With its hand forced, however, by dwindling earnings, the folding of theatres and the relentless pressure of competition, the industry opened its film files to television and began producing films strictly for TV consumption. The respite provided is being used by the studios to clean house internally and possibly regroup industry forces.

Housecleaning at Loew's

Loew's, with the dust of its recent battle for control hardly settled, has begun its housecleaning with a massive broom. Under pressure from a four-man executive committee chairmanned by Ogden R. Reid, president and editor of the New York Herald Tribune, and including Frank Pace, Jr., newly elected president of General Dynamics Corp., and George L. Killion, president of American President Lines, Loew's president Joseph R. Vogel has started sweeping out deadwood and expensive ornaments and is making progress in bringing costs under control. In his brief tenure, so far, he has surveyed the entire studio op-

eration, which reportedly lost $5 million last year—has cut overhead by some $2 million a year—and has reportedly launched an all-out attack on nepotism, one of the most debilitating of corporate diseases, by cancelling contracts with outside vendors personally related to Loew's executives. Vogel appears to be striving for personal recognition and will undoubtedly continue his efforts to streamline the company and remain in his job.

He will be prodded, however, by Ogden Reid, who as the thirteenth board member is the balance wheel and in a position to call the shots. The board includes, in addition to those named, Louis A. Johnson, former Secretary of War, J. L. Sullivan, once Navy Secretary, and former Chrysler head, K. T. Keller. Reid, wasting no time about it, has negotiated a top-to-bottom management survey of the whole company, and has requested William Zeckendorf, real estate tycoon and sparkplug of Webb & Knapp Inc., to make a physical appraisal of theatre properties to determine their worth, and to help management decide which should be held and which sold. Since apportionment of $30 million of funded debt is the principal stumbling block to compliance with a consent decree ordering Loew's to separate its theatre and production facilities, the eventual sale of properties not earning a reasonable return on invested capital could be applied to the debt, removing some of the obstacles to separation of the two operations.

That drastic action must be taken is indicated by Loew's recent earnings picture. In the first sixteen weeks of 1957 per share net slipped to 18¢ from 31¢ a year ago, continuing a trend that has seen earnings drop from $1.28 in 1954 to $1.03 in 1955 and 91¢ in 1956. Fortunately, much of the loss from production is being offset by revenues from the release of the company's pre-1949 films to TV outlets. The leases are expected to produce more than $40 million in revenues over a seven year period and should allow time for management to work out some of its difficulties.

Loew's-Twentieth-Century Nuptials?

Meanwhile, Twentieth Century-Fox, another member of the cast is moving ahead with bolder strokes. Skouras has already announced his intention to release 55 motion pictures this year, more than any company has released since 1940, on the assumption that theatre attendance can only be rebuilt by better pictures. With this production, he is also building a backlog of future releases to TV, since he is convinced that the long range success of that industry will depend, in good part, on good films made by the motion picture producers. Television's appetite for talent and features is apparently insatiable, and Skouras intends Twentieth Century to remain one of its principal suppliers of film-fare.

As a matter of fact Skouras has been successful in converting TV from a dangerous enemy to a profitable ally. Among other TV activities, Twentieth Century owns a 50% interest in the NTA Film Network to which it has released 237 of its pre-1949 films, at a rental which is expected to amount to $5.5 million in both 1957 and 1958. Still untapped are 560 additional older films, held up by negotiations with various screen guilds and unions, as well as 210 films turned out since 1949.

Actually most of the company's net income of $2.34 per share in 1956, and the sharp advance in this year's first quarter to 82¢ from 17¢ a year ago, can be attributed to non-film producing activities, notably, TV, foreign operations, and oil production from its Hollywood properties. The valuable 280 acre tract the company uses for film production has been considered an ideal spot for office buildings, stores and apartments, which would not interfere with the oil drilling and production activities now being done on the plot. It is expected, incidentally that after drilling costs have been recovered, the company will realize over $1.6 million annually in oil income.

It is not surprising, therefore, that Skouras has been "negotiating" with Loew's, since use of the M-G-M facilities would free this valuable piece of real estate for other profitable uses. But when viewed as a combined company the significance is even greater, since the two companies tend to complement and strengthen each other. Overhead and production cost would be sharply reduced, and perhaps most important, management would be strengthened considerably. Of course, veterans of the industry such as Skouras may be considering retirement, but a com-

Statistical Data on Leading Motion Picture Companies

	Earnings Per Share		1st Quarter		Dividends Per Share		Recent Price	Div. Yield	Price Range
	1955	1956	1956	1957	1955	1956			1956-1957
Allied Artists Pictures	$ .60	$ .27	$ .14[1]	[d]$1.29[1]	$ .10	$ .15	3⅝	4.1%	6¼- 3⅛
Columbia Pictures	4.51	2.22	1.43[8]	1.11[3]	1.00[5]	1.20[5]	18	6.6	26¾-17
Loew's Inc.	1.03	.91	.31[2]	.18[2]	1.00	1.00	20	5.0	25⅛-18⅛
Paramount Pictures	4.49	4.43	.64	.66	2.00	2.00	35	5.7	36¾-27⅜
Republic Pictures	.27	.18	.34	.06	[6]	[6]	7	....	8⅞- 5
Technicolor, Inc.	1.03	.60	.25	.09	1.00	.50	6½	7.6	13¼- 6½
Twentieth-Century-Fox	2.28	2.34	.17	.82	1.60	1.60	28	5.7	29¼-21⅛
Universal Pictures	3.71	4.06	1.10[3]	.12[3]	1.25	1.25	26	4.8	29¾-23¼
United Artists Corp.	2.68[7]	3.11[7]	......	......	......	1.40	20½	6.8	20¾-18¼
Warner Bros. Pictures	1.62	.85	.75[4]	1.44[4]	1.20	1.20	25	4.8	29¼-18½

[d]—Deficit.
[1]—39 weeks ended Mar. 31.
[2]—16 weeks ended Mar. 14.
[3]—13 weeks ended Feb. 2nd.
[4]—6 months ended Mar. 2nd.
[5]—Plus stock.
[6]—Paid 5% stock in 1955 and 1956.
[7]—Based on 300,000 com. stock, and 650,000 class 'B' stock.
[8]—26 weeks ended Dec. 31, 1955 and 1956.

Comprehensive Statistics Comparing the Position of Leading Motion Picture Companies

Figures are in millions, except where otherwise stated.	Columbia Pictures	Loew's Inc.	Paramount Pictures	Twentieth Century Fox-Film	Universal Pictures	Warner Bros.
CAPITALIZATION:						
Long Term Debt (Stated Value)	$ 18.0	$ 42.6	$ 24.4	$ 19.2	$ 7.3	$ 3.5
Preferred Stocks (Stated Value)	$ 5.7	.....	.....	.....	$ 5.2	.....
No. of Common Shares Outstanding (000)	1,094	5,303	1,971	2,644	927	2,482
Capitalization	$ 38.8	$ 91.0	$ 26.6	$ 21.8	$ 13.7	$ 15.9
Total Surplus	$ 16.2	$ 95.7	$ 80.9	$ 82.3	$ 29.9	$ 47.0
INCOME ACCOUNT: Fiscal Year Ended	6/30/56	8/31/56	12/31/56	12/31/56	11/3/56	8/31/56
Total Revenue	$ 91.1	$ 72.3	$ 93.3	$121.1	$ 77.6	$ 76.6
Deprec., Depletion, Amort., etc.	$ 1.5	$ 4.0	$ 1.6	$ .6	$ 1.1	$ .3
Income Taxes	$ 1.7	$ 3.2	$ 1.3	$ 5.0	$ 4.2	$ 1.7
Interest Charges, etc.	$ .7	$ 1.4	$ .9	$ .6	$ .3	$ .1
Balance for Common	$ 2.4	$ 4.8	$ 8.7[2]	$ 6.2	$ 3.7	$ 2.0
Operating Margin	5.4%	5.3%	4.8%	8.9%	10.4%	4.5%
Net Profit Margin	2.9%	2.7%	9.3%[2]	5.1%	5.1%	2.7%
Percent Earned on Invested Capital	7.2%	3.3%	10.5%[2]	7.3%	13.0%	3.5%
Earned Per Common Share*	$ 2.22	$ .91	$ 4.43	$ 2.34	$ 4.06	$ .85
BALANCE SHEET: Fiscal Year Ended	6/30/56	8/31/56	12/31/56	12/31/56	11/3/56	8/31/56
Cash and Marketable Securities	$ 10.2	$ 26.1	$ 16.3	$ 25.4	$ 4.8	$ 5.6
Inventories, Net	$ 40.2[1]	$ 62.4[1]	$ 57.1	$ 46.4	$ 32.9	$ 42.6
Receivables, Net	$ 5.6	$ 9.5	$ 7.0	$ 15.7	$ 3.0	$ 2.8
Current Assets	$ 56.9	$107.0	$ 82.0	$ 93.9	$ 41.0	$ 51.1
Current Liabilities	$ 6.3	$ 29.1	$ 12.0	$ 24.2	$ 10.4	$ 20.4
Working Capital	$ 50.6	$ 77.9	$ 70.0	$ 69.7	$ 30.6	$ 30.7
Current Ratio (C. A. to C. L.)	9.0	3.6	6.8	3.9	3.9	2.5
Fixed Assets, Net	$ 7.2	$ 92.3	$ 30.6	$ 18.6	$ 10.0	$ 11.4
Total Assets	$ 65.1	$220.6	$133.6	$134.0	$ 52.7	$ 86.3
Cash Assets Per Share	$ 9.69	$ 4.93	$ 8.31	$ 9.53	$ 5.20	$ 2.26

1—Includes cost, productions, rights and scenar., film stock and supplies, etc.
2—Includes capital gain in sale of films and invest.
*Data on prices, earnings and div. on preceding page.

bined company would be fertile soil for the development of new managerial talent.

Warner-United Artists Also In Cast

While the Loew's-Twentieth Century-Fox romance is building up to the courting stage, other developments in the industry are thickening the plot. Whispers, in the real "who-done-it" tradition, have it that plans are under way to combine Warner Bros. Pictures, a leading producer, and United Artists, until recently a privately owned company. Prime mover behind the scenes is said to be a prominent attorney, but aside from conjecture, recent changes in control of both companies suggest big doings.

Just last April, United Artists sold its securities to the public and joined the other major producers as publicly held companies. Control remained in the hands of A. B. Krim, president, and Robert S. Benjamin, board chairman under a joint tenancy agreement expiring in 1967. After buying out Mary Pickford and Charles Chaplin, the last of the original silent film stars who formed the company in 1919, the stock of the company was reclassified in March 1957 into 350,000 common shares and 650,000 class B common shares. All of the common, and $10 million in debentures were sold to the public, but the class B common was retained under the tenancy agreement described above. While the debentures are outstanding the company cannot vote its controlling shares in favor of merger or sale, except under certain conditions, but undoubtedly a favorable merger would not be blocked.

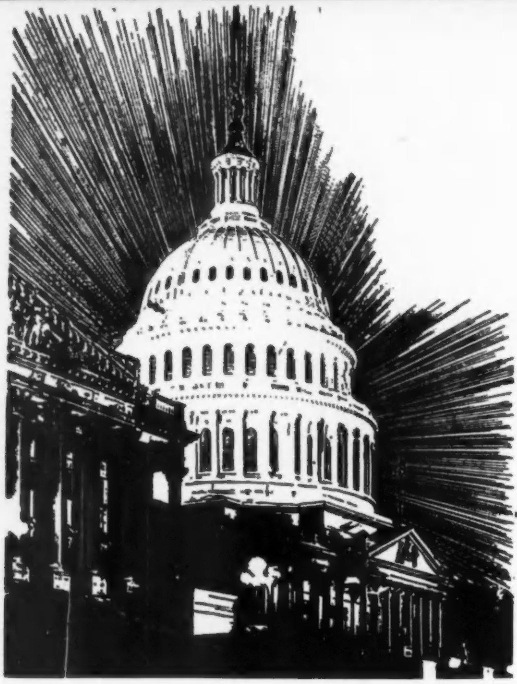
United has enjoyed particular success in recent years. It produces no films itself, but provides financial backing for others and derives its revenues from investment in the films and from distribution rights both at home and abroad. In the five years from 1951 to 1956, net income has advanced ten-fold to $3.48 on each of the reclassified shares.

Warner Bros. has also been undergoing some radical changes. About a year ago, working control was sold to a banking group by members of the Warner family, but Jack L. Warner, president, retained his stock and has since increased his holdings. Through tenders by stockholders and open market purchases, the company has reduced the outstanding shares to approximately 1,828,000 shares and has 686,000 shares in the treasury available for future dealings.

The company, a major film producer and distributor has important foreign interests, and recently sold its film library, shorts, and cartoons to TV for $21 million. Earnings, which had declined to 85¢ per share in 1956 from $1.61 a year earlier reversed themselves in the first six months of fiscal 1957, climbing to $1.44 from 75¢ a year earlier.

Massive Merger Rumored

Both Warner and United Artists have taken a more passive role in the TV struggle, but a merger would undoubtedly (*Please turn to page* 376)



Inside Washington

By "VERITAS"

PREDICTION that the United States, having registered no objection to resumption of unlimited trading with China on the part of our Allies, would soon be edging toward reopening of commercial relations seemed safe at the time it was uttered. It is even safer now. The situations are linked. Friends of the United States are embarrassed in their dealings, they say, by the fact that this nation maintains its aloofness from China marts. So the subject is being studied. A Senate subcommittee under Senator Warren G. Magnuson is on the job.

WASHINGTON SEES:

President Eisenhower has served notice on Congress that he may veto any tax cut that comes to his desk and in this announcement is the making of a new battle with Capitol Hill. Ike contends there will not be income surplus sufficient to chance a cut in tax rates. He premises this declaration on acceptance by Congress of his $71.8 billion budget with no substantial pruning.

Examining the financial picture as Congress goes into the final stretch it is not easy to detect the formations of a tax reduction. The democrats will try hard; Rep. John McCormack majority leader, fixes June 20 as target date for the big announcement: will there be a cut; if so in what manner and how much? That date is nearing and the answers are not in sight. There has been nothing to underwrite the demmies confidence that income will sufficiently exceed outgo to leave a safe balance. The budget figures are misleading: spending in the next fiscal year will exceed the Ike budget figure by at least $1 billion. Increased costs, especially for military items, will accelerate disbursement of funds voted and allocated in previous years; curtailments voted this year will have ther greatest impact on fiscal 1959 spending.

Speaker Sam Rayburn is completing another circuit: at the year's beginning he predicted there would be little or no budget cut, hence no tax cut; then he foresaw reductions in both; today he sees possibility, nothing more, of a tax cut—next year.

STRATEGIC MATERIALS remain on the banned commodity list in most of the dealings with the Western Democracies. But that's a matter of degree: the late Senator McCarthy never received an answer to his persistent question, "What commodity is *not* strategic?" Limited trade means little more than no shooting irons are sold to China. In the case of this country, it would require legislation to permit sale of anything to any country dealing with an embargoed nation, but the Battle Act of 1951 isn't being truly enforced. The Magnuson inquiry will open that question wide: foes will seek to narrow, not broaden, business with Reds or their traders.

OPTIMISM characterizes talks on world disarmament. Admiral Radford's attitude that Russian promises should not be accorded full faith and credit would have been labeled a mild rejection one year ago; coming at this time, it brought words of censure from the White House and Capitol Hill. Harold Stassen is living another of his nine political lives: he's riding the crest again, winning applause from the President and spokesmen from both parties. Stassen hasn't developed a workable formula at the London conferences but there seems to be a spirit of willingness which made Radford's comment sound inexcusable closed mindedness.

FLOOD INSURANCE, once rejected by the House, stands a fair to good chance of reinstatement in the Senate. Only $14 million is involved at this point: money to pay agents and brokers for selling coverage backed by Government's promise to relieve casualties up to $3 billion annually—a figure more than twice the loss experience of any year in modern history. Existing insurance sales organizations would place the policies.

—END

As We Go To Press

▶ Congress, busy attending to the problems of union trust funds, found itself with one of its own when a flareup came in the normally placid proceedings of the House Banking and Currency Committee. The issues were carried to the floor before being resolved. Democrats on the committee conceived the idea of financing home mortgages with money from the National Service Life Insurance Fund. Republicans saw what they considered a dangerous diversion in the making. They succeeded in blocking it.

▶ The incident served to focus attention on a facet of Federal finance that normally gets little attention: Federal trust funds. By July 1 there will be more than $50 billion invested by the Government in various accounts. Congress has been meticulous in providing that these monies should be safeguarded by being invested only in United States bonds. Almost one-fifth of the Government debt now is held in this manner.

▶ Major trust funds are: Federal Old Age and Survivors Insurance Fund, $23 billion; Unemployment Trust Fund, $9 billion; Veterans Life Insurance Fund, $6 billion; Federal Employment Retirement Fund, $7 billion; Railroad Retirement Account, $3.5 billion; Federal Disability Insurance Fund, $327 million; Highway Trust Fund, $390 million. To use these funds for any purpose except pure investment would give Congress an opportunity to spend money without having it appear in the budget. More important, it would entail the danger of the money not being available when needed for the purposes for which the trust fund was created.

▶ This was not the first time attempts were made to use the trust money to avoid appropriating out of current tax income. Discovery that funds contributed to a retirement account are not always on ready tap has caused concern, has created political issues. Only recently, the Manion Forum circulated this observation: "It would be important for Congress to determine what has been done with the $19 billions which have been lifted from the Social Security Trust Fund and just how much it is going to cost the taxpayers to get that money back. This is defalcation that affects all of the American people."

▶ The charge (and it amounts to a charge) reached the House Ways and Means Committee. Rep. Robert W. Kean, ranking republican member, made the answer: "I feel that Dean Clarence Manion never would have allowed the publication of such a statement if he had thought the matter through. Bonds sold to trust funds are listed as part of the national debt as are all other obligations of the Government. Is there any form of investment that is safer than United States Government Bonds? I think not. So far responsible members of past administrations and of Congress have kept these trust funds inviolate. However, with the enormous sums of money in them it will be necessary to maintain continual vigilance to insure their protection."

▶ President Eisenhower's televised appeals for high Federal spending must have boomeranged: The White House refused to say how the mail and other messages have been running in point of support or rejection. It's the first time this has happened. Sometimes the exact number of messages, each way, has been available; usually it has been revealed in percentages. But never before denied to reporters. There must be a reason!

▶ Euratom (European Atomic Energy Community) has set a goal of 15 million kilowatts of atomic power on the Continent in the next 10 years, and this brings sighs of relief in Washington. Belguim, France, West Germany, Italy, Luxembourg and the Netherlands, partners in Euratom, have taken steps which will offset a genuine threat to their economy, if not their

national existence. Surveys show the move didn't come too soon.

▶ When World War II broke, Europe was rounding out a century as dominant producer of energy. Much of it was destroyed in the conflict. There was a post-war recovery, but in the past seven years, the Euratom investigators found, a sharp reversal has been at work. Europe today has lost its independence in energy: she now imports one fourth of her fuel, mostly oil; in 10 years it's figured the import would be one-third; in 20 years, one half -- if coal and oil remained the only fuels.

▶ What the Euratom countries now are planning repeats in a degree what Britain went through in 1955 when faced with a similar situation. England will put about 6 million kilowatts of atomic power on its lines by 1965, but begin a fuel import levelling off several years earlier.. Euratom hopes to reverse the import trend about 1963. Both the British and the Euratom programs will forestall dangerous drains on foreign exchange earnings; will lessen the force of the Middle East oil as an element in international decisions.

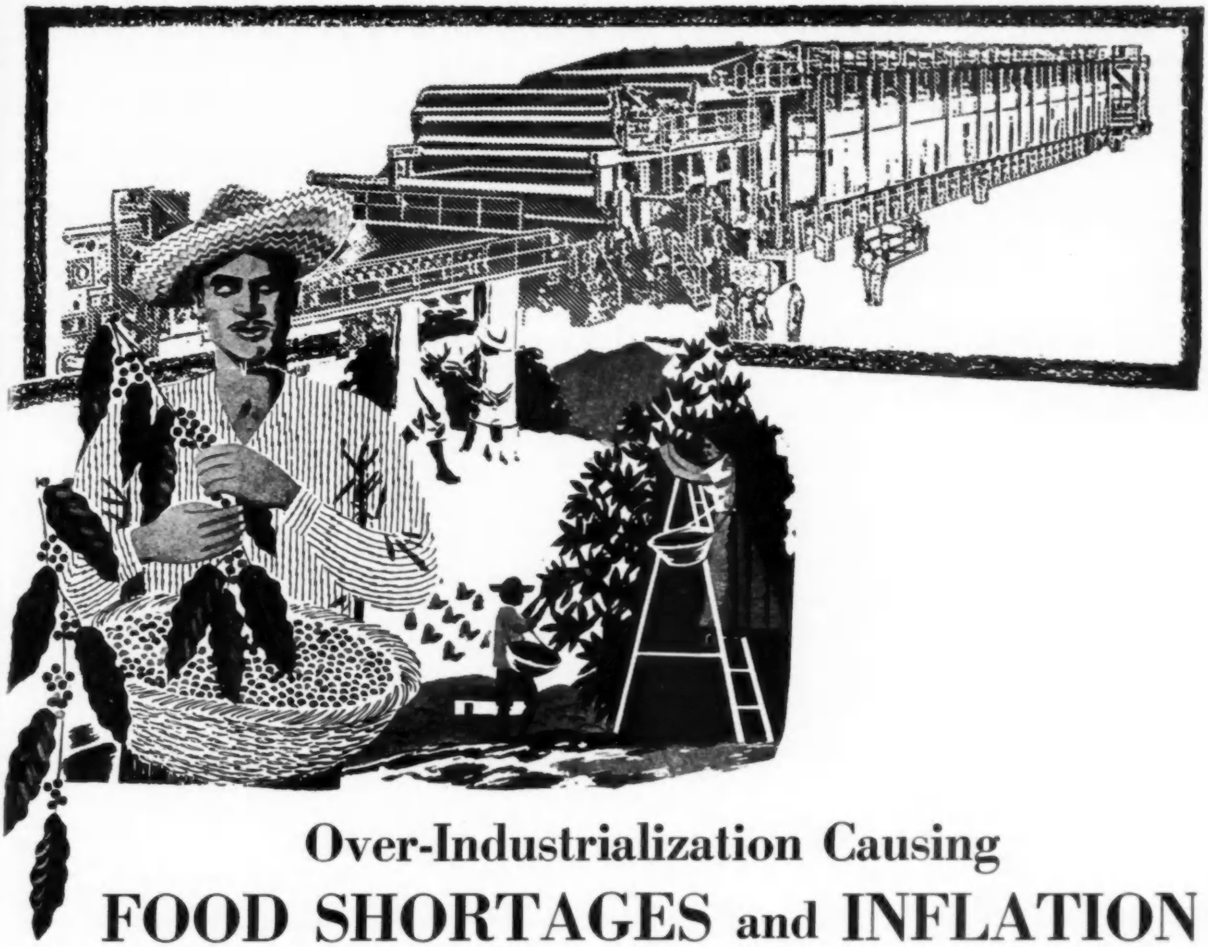
▶ The goals can't be reached without cooperation from the United States and Canada. They must supply most of the early plant, know-how, and uranium. Repayment will be in money and experience, mostly the latter — and that's important because abundance of other fuels here has a tendency to delay nucleur power development on the home grounds. There is no immediacy for an all-out A-power program, and Congress is doing little to give one encouragement. Witness the lag on insurance and on providing demonstration reactors.

▶ When President Eisenhower told a regional political meeting in a telephoned talk that he needs more republicans in Congress to promote his legislative program, democrats answered that what he needs is support from the republicans he already has. And the retort is more than a wisecrack. An analysis of House votes on the bill appropriating for the Depart ment of Labor, and for the Department of Health, Education and Welfare (the first money bill to have yea-and-nay record) the President didn't do so well. There were 14 roll calls on slashing Ike's budget, and 12 saw a majority of republicans voting against the President.

▶ The GOP leader, Rep. Joseph W. Martin, and the GOP whip, Rep. Leslie Arends voted for nine of the 14 proposed cuts. On the other hand, the democratic leader and whip, Reps. John W. McCormack and Carl Albert, supported President Eisenhower every time. Of the 90 Congressmen voting for every cut, 74 are republicans and 16 are democrats. Meanwhile, Rep. McCormack was doing little to explain the position of his party on the economy front. He has said he'll vote for Ike's full foreign aid budget, doesn't want defense funds cut — but he predicts an overall reduction in the budget ranging between $3.5 and $4.5 billion; meanwhile, says the Massachusetts lawmaker, payment will be made on the national debt AND taxes will be cut! A large order, and he stands absolutely alone on it.

▶ In his concentration of attention on the Washington tax gouge, the taxpayer may be forgetting the bite that's being taken out of him by the state and municipality. In 1932, the people of the United States paid $6,375 million for local government. The cost this year will be $26,230 million. For state government in 1932, the total was $2 billion; this year it will be $11 billion. Cost of operating the Federal Government 25 years ago was $5,125 million; the President's budget calls for more than $71,000 millions. Overall, the cost of government has jumped from $13.5 billion to $109.5 billion in a quarter of a century -- a 700 per cent increase.

▶ The upswing in the debt has been roughly comparable. In 1932 the bonded indebtedness of local governments stood at $16,680 millions. Now it is more than $33 billion. Debts of state governments have increased from $3 billion to $11 billion in the same period; The Federal government's increase is the most startling: from $19.5 billion in 1932 to $274 billion now. Total debt -- local, state and federal -- has zoomed from $30 billion to more than $318 billion.



Over-Industrialization Causing
FOOD SHORTAGES and INFLATION
in Agricultural Economics

By V. L. HOROTH

One of the economic ailments of the present era of development fever—which has not spared even the heart of Africa—has been the overdose of industrialization. The countries that have now been industrializing for several decades, such as Argentina and Turkey, as well as the countries that are just beginning to industrialize, such as the Philippines or Indonesia, are dotted with what one may call "economic monstrosities": steel and cement plants that have to be heavily subsidized, manufacturing establishments that have never worked at full capacity because of shortages of raw materials or skilled labor, and hydroelectric projects that are operating only part of the year, are all monuments to mistaken planning, poor investment, and above all, headlong industrialization at any cost.

Unfortunately these industrial "white elephants" represent only a minor part of the cost of industrialization. More often than not, as will be seen from examples in this article, hurried industrialization, by upsetting the established order of things, created maladjustments more serious than the old ones it was intended to cure. Almost invariably—especially in capital-poor countries, where extensive use was made of budget deficits and bank credit—headlong industrialization brought on inflation, which led to new distortions and an uneconomic redistribution of wealth. By making it more difficult to sell abroad and by encouraging imports, the combination of headlong industrialization and inflation brought about balance-of-payments difficulties.

But the most serious consequence of the rush to industrialize is the dislocation of the balance among individual segments of the national economy. Agriculture was neglected as people flocked into the cities to seek more lucrative employment in factories. This brought on food shortages, and with farm incomes crippled, there was no one to buy the products of the new factories—so they had to be exported at the expense of the impoverished nation.

This is not to say that individual countries have been wrong to industrialize. On the contrary, in most of the underdeveloped countries there is little hope of achieving higher living standards through agri-

cultural improvement alone. This is especially true of such countries as India and Mexico, where land resources are limited and soil and climate are not suitable for highly productive farming. But there is little excuse for headlong industrialization in countries such as Hungary, Indonesia, and Argentina, which have plenty of good land and where a proper agricultural program together with industrialization could assure the population a fairly high per capita income.

Another understandable reason for industrialization has been the desire of primary-producing countries to rid themselves of what could be called the "colonial heritage": the dependence for export income on one or two commodities (as Colombia, for example, is dependent on coffee) over the prices of which these countries have no control. There have been special motives for speedy industrialization: in Turkey, for instance, it was the need for better defense; in Australia, the relative isolation. In Argentina during the Peron Era, industrialization was pushed hard not only to reduce the instability of the country's economy, but also to win for Argentina economic dominance on the South American Continent.

Overindustrialization as Background of Events in Hungary and Poland

Nowhere has industrialization been pushed as hard as in some of the East European Satellite countries, notably Hungary and Poland. Severe maladjustments which have resulted from this drive and the deterioration of living standards were the major causes of the popular revolts last Fall.

Hungary, which has some of the best farm land in Europe, paid its way before the war by exporting agricultural surpluses. But farm over-population was becoming a problem, and even the pre-war governments recognized the need of some industrial development. The communists greatly speeded up the process, partly to satisfy the Communist Orbit's requirements for industrial products and partly to build a strong class of industrial workers to support them against the peasantry.

They succeeded too well. By 1955, Hungary's industrial output was four times as great as before the war. As will be seen from the accompanying table, the number of industrial workers more than doubled, whereas the number of farm workers dropped from about 1.9 million in '38 to less than 700,000. A wholesale exodus from farms was encouraged not only by better wages offered in industrial establishments, but also by the collectivization of land and the low prices fixed on agricultural deliveries. Troubles would have been avoided if the communists had provided those remaining on farms with better equipment; the flat Hungarian plain invited farm mechanization. Instead, the communists kept on investing heavily in industrial equipment. Yet Hungary, with the exception of some petroleum, bauxite, and coal, has no industrial resources. Coke, iron ore, textile raw materials, nonferrous metals, and special steels must all be imported. By '54, when the drought struck, Hungary, once a great wheat and meat exporter, could no longer even feed itself. Food had to be imported and paid for by the products of high-cost, uneconomic Hungarian industries: railway equipment, buses, bicycles, machine tools, and even textiles.

The situation has been much the same in Poland, except that the Poles are somewhat better supplied with such industrial raw materials as coal and steel. On the other hand, the change in the economic structure has been even more radical in Poland than in Hungary, the shares of industrial output in the gross national product having risen from less than half before the war to almost four-fifths at present. But the peasants, who have had little incentive in the way of consumer goods, have produced little beyond their own requirements. Like Hungary, Poland, once a granary of Europe, now exports coal, industrial equipment, and chemicals to pay for food and raw material imports.

In both Poland and Hungary, the communists now propose to slow down the pace of industrialization. Exodus from farms is being discouraged, and the farmers are being enticed into producing more by higher prices and the promise of more and better equipment. It will take time, however, before the hard-bitten peasant in Hungary or Poland is persuaded that the wind has changed.

U. S. Aid Saves Yugoslavia from Near Disaster

Yugoslavia was saved from the near-disaster that befell Hungary and Poland by a revision of her over-ambitious industrialization program, and by American food and technical assistance. Four years ago, the Yugoslav economy found itself in a knot. Too much had been attempted with too few resources and limited technical experience. Production was almost at a standstill. An up-to-date steel mill, for which the nation paid dearly by denying itself consumer goods, could not be operated because no provisions had been made for sufficient supplies of iron ore and coke. A copper rolling mill and a seamless steel tube mill stood idle because of lack of electric power. Large tracts of fertile land lay untilled because the peasantry was sent to work on development projects and in factories. To top it all,

Hungary's Economic Deterioration

		1913 ('11-'15)	1938 ('36-'40)	1954
Population	millions	7.8	9.1	9.7
Industrial workers	millions	0.7[1]	1.3	2.5
Farm workers	millions		1.9	.6
Manufact. output	1913-100	100	142	560[1]
Steel output	million tons	.4	.6	1.5
Electricity prod.	million kwh	....	1.4	4.8
Hard Coal output	million tons	2.1	9.4	21.5
Crude oil output	million tons	....	.1	1.2
Farm output		....	100	74
Bread grains	million tons	2.8	3.0	2.1
Potatoes	million tons	1.9	2.3	2.5
Sugar beet	million tons	1.5	1.0	1.9

[1]—Partly estimated.

the harvest was a failure because of drought.

To avoid famine in Yugoslavia, the United States sent food and also help for the completion of the factories and development projects under construction. At the same time, Marshal Tito's Government began to reverse its earlier industrialization policies. New investments are now being limited largely to consumer goods industries where a small outlay can bring a quick return. More money is also being spent on agricultural equipment and, in sharp contrast with the earlier postwar years, workers are now being urged to return to farming.

Farm Output in Latin America

	Acres Tilled per Farmer 1935-47	Acres Tilled per Farmer 1954-55	Farmer Output per Worker 1935-47	Farmer Output per Worker 1954-55	Tractor per 1000 acres 1935-47	Tractor per 1000 acres 1954-55
Mexico	3.6	3.7	100	142	1.0	2.8
Brazile	4.0	4.7	100	122	.2	.8
Uruguay	12.6	16.5	100	131	3.6	6.9
Chile	5.7	5.9	100	107	1.1	3.5
Argentina	19.0	17.5	100	92	.9	1.4
United States	33.8	39.5	100	140	7.2	12.4

SOURCE: Eco. Survey of Latin America, 1956.

In general, Yugoslavia is trying to avoid anything that would bring back the period of economic convulsions created by over-industrialization. Internal trade is being encouraged by building up what the European economist call "infra-structure" of country—roads, railways, communications and public services. Yugoslavia is responding favorably to this treatment. The danger of violent inflation seems to be gone, idle fields are bearing crops again, and living standards are rising, though compared with neighbouring Austria they remain woefully low.

Industrialization Troubles in Turkey

In Turkey, the 3½ decades of ambitious and often haphazard industrialization and development policies have produced a serious, chronic inflation. But there was little uprooting of the rural population, and agricultural production actually increased substantially when in the years 1949-53 the authorities began to emphasize mechanization, the improvement of farm methods, and the building of rural roads. In part this was due to the realization that the newly-built industrial plants needed a broad internal market to prosper and expand. Thus the Turks were among the first to discover that balanced growth is essential, that industrial expansion without the improvement in farm productivity would leave the farmers in a state of poverty and without purchasing power for industrial goods.

The Turks rushed into industrial development with little foresight and experience. As one U. S. official said, "In the pellmell rush nobody found time or talent to coordinate and manage all the divers projects." Factories were located in one part of the country and the electric power to run them in another. Sugar mills were built near the cities, not near the beet fields, while the country's largest steel mill must haul both coal and iron ore over a distance of 600 miles. Relatively enormous amounts of capital—for Turkey at least—have been tied up in projects that may be essential for the country's defense but that are slow in paying off in productive output. As a result the country has experienced serious inflation, made worse by a series of drought years. This has crippled Turkey's foreign exchange carning capacity, while import requirements of industrial raw materials and capital goods are rising. There seems to be no way out but to slow the long-range development program which the Turkish Government has been trying to finance by short-term loans. However, new plants are constantly coming into production and the country's economy is broadening and expanding.

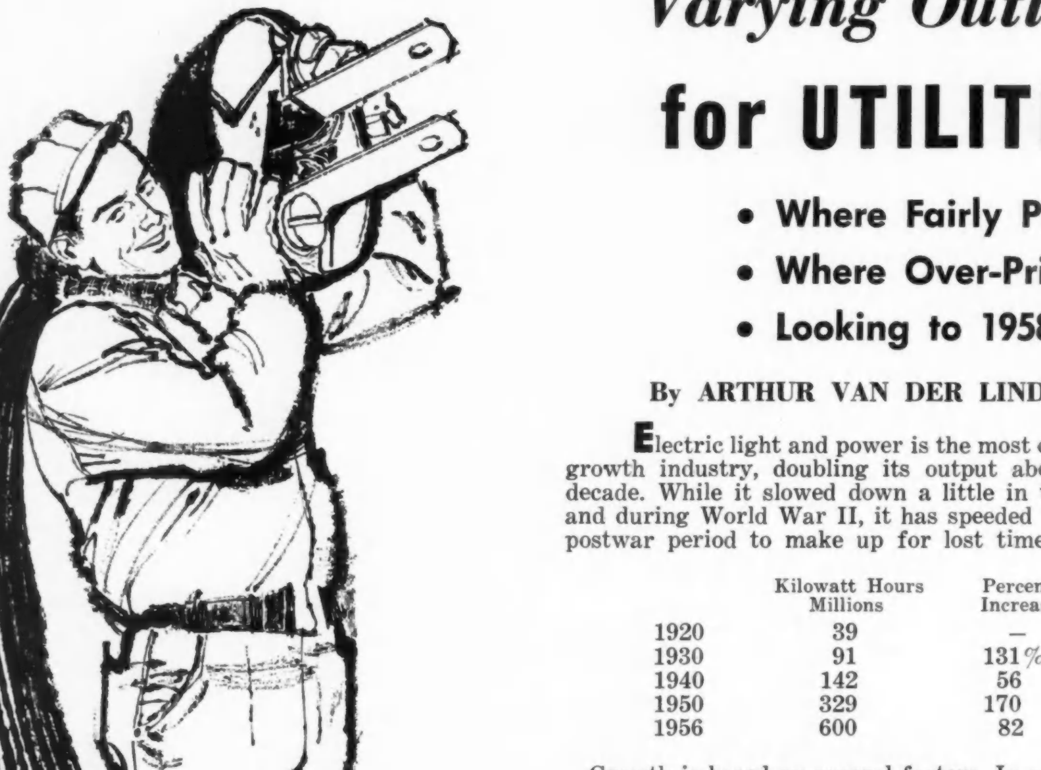
Over-hurried Industrialization Halts Progress In Argentina

Industrialization has by this time been well rooted in most Latin American countries, but it has also created formidable problems, not only economic, but also social and political. In a number of countries the political power which was held since the Spanish colonial days by the conservative land-owning element is now held by parties whose strength comes from the rapidly rising urban and industrial population.

Paradoxically, Argentina, once the wealthiest among Latin American Republics and with resources that favored industrialization, has made the worst mess of it. By the end of the first postwar decade, economic growth had come to a halt, and both over-all production and living standards had actually declined below the levels of the earlier postwar years.

Obsessed by the idea of ending Argentina's "colonial economy," General Peron considered no sacrifice too great in pushing industrialization. Within less than a decade there were but few industries not represented in Argentina: there were shipyards, motor car and aircraft manufacturing companies, and even firms producing radar and electronic equipment. The manufacturing work force increased by 50 per cent, while employment on farms declined sharply. It was agriculture that bore the brunt of financing industrialization by forced deliveries to the once infamous Y.A.P.I.—a government purchasing organization—of products at fixed prices for resale abroad at fabulous profits for the government. Again trouble could have been averted by providing those who remained on the farms with better income and tools and by mechanizing agriculture. But with all the money being spent for factory equipment, there was little or nothing left to buy tractors and other farm machinery.

With agricultural production declining and the urban population growing, Argentina found itself with little to expect at a time when the demand for imported capital goods, petroleum, and essential raw materials for industries had grown enormously. When the foreign exchange reserves approached the point of exhaustion, there was nothing left to do but retrench and reverse the industrialization policies in favor of reorganizing and streamlining the long-neglected agricultural segment of the economy. This task as well as the job of (*Please turn to page* 372)



Varying Outlook for UTILITIES

• Where Fairly Priced
• Where Over-Priced
• Looking to 1958

By ARTHUR VAN DER LINDE

Electric light and power is the most consistent growth industry, doubling its output about every decade. While it slowed down a little in the 1930s and during World War II, it has speeded up in the postwar period to make up for lost time:

	Kilowatt Hours Millions	Percent Increase
1920	39	—
1930	91	131%
1940	142	56
1950	329	170
1956	600	82

Growth is based on several factors. In residential use there are the increase in population, the number of new homes being built, better lighting standards, the popularity of new electric appliances, and the greater use of heavy current consumers such as electric heaters and ranges. The rapid growth of television, the gain in air conditioning, the use of laundry dryers, and other home appliances have been important factors. In industrial plants every increase in automation means more use of electricity, in addition to the rapid rise in business activity in recent years.

It seems unlikely that the rate of growth in kwh generation will slow very greatly although a setback

Comparative Earnings, Dividend Record and Comment on Important Electric Utilities

	Earnings Per Share 1954	1955	1956	1st Quarter 1956	1st Quarter 1957	Div. Per Share 1956	Recent Price	Div. Yield	Price-Earnings Ratio*	Price Range 1956-1957
American Gas & Electric	$1.68	$1.94	$2.03	$ .57	$ .59	$1.44[1]	39	3.6%	19.2	43½-31⅜
Baltimore Gas & Electric	1.89	2.02	2.32	.81	.98	1.80[1]	35	5.1	15.0	35⅞-31⅞
Central & South West Corp.	2.00	2.04	2.32	.43	.44	1.60[1]	41	3.9	17.5	43⅛-33
Cincinnati Gas & Electric	1.72	1.90	1.99	.86	.83	1.20[2]	28	4.2	14.0	30 -24¾
Cleveland Electric Illum.	1.93	2.49	2.60	.84	.79	1.60	43	3.7	16.5	43⅞-34¼
Commonwealth Edison	2.70	2.62	2.72	.79	.84	2.00	40	5.0	14.7	44¾-38¾
Consolidated Edison	2.98	3.12	3.20	1.26	1.21	2.40	44	5.4	13.7	49⅜-43½
Consumer Power Co.	3.10	3.11	3.33	3.23[3]	3.15[3]	2.40[1]	48	5.0	14.4	51⅜-43¾
Dayton Power & Light	2.88	3.36	3.81	(n.a.)	(n.a.)	2.40[1]	48	4.9	12.6	50 -43⅛
Detroit Edison	2.05	2.43	2.36	.72	.81	2.00	41	4.8	17.3	41⅞-33⅞
Duquesne Light Co.	2.26	2.34	2.44	.72	.71	2.00	36	5.5	14.7	38⅞-33
General Public Utilities	2.42	2.81	3.05	.84	.85	2.00[1]	39	5.1	12.7	39½-34
Illinois Power Co.	1.41	1.73	2.00	.67	.65	1.50	29	5.1	14.5	32⅜-25
Middle South Utilities	2.13	1.93	2.18	.43	.50	1.60	37	4.3	16.9	37¾-26⅞
New England Electric System	1.16	1.24	1.23	.39	.39	1.00	17	5.8	13.8	17⅝-16½
Niagara Mohawk Power	2.11	2.22	2.13	.76	.70	1.80	31	5.8	14.5	34⅝-28½
Northern States Power	1.07	1.16	1.21	.38	.38	.90	17	5.2	14.0	18¼-16½
Ohio Edison	3.02	3.55	3.79	1.02	.98	2.64	52	5.0	13.7	58¼-48⅛
Pacific Gas & Electric	2.88	3.32	3.37	3.39[3]	3.36[3]	2.40	50	4.8	14.8	53¾-47
Philadelphia Electric	2.25	2.39	2.59	.83	.88	2.00[1]	40	5.0	15.4	40⅝-35⅞
Public Service Elect. & Gas	1.96	2.26	2.10	.99	.94	1.80	31	5.8	14.7	35½-31
Puget Sound Pow. & Lt.	1.37	1.51	1.67	.44	.49	1.36[1]	30	4.5	17.9	30½-22½
Southern California Edison	3.06	3.32	3.48	.92	.77	2.40	50	4.8	14.3	54⅛-45
Southern Co.	1.29	1.35	1.54	1.40[3]	1.54[3]	1.10[1]	24	4.5	15.5	24¾-19¼
Union Electric Co.	1.65	1.70	1.70	(n.a.)	(n.a.)	1.52[1]	29	5.2	17.0	30 -25¾
Utah Power & Light	1.44	1.55	1.70	.46	.49	1.20[1]	28	4.2	16.4	29¼-23⅜
Virginia Electric & Power	1.10	1.27	1.39	.39	.44	1.00[1]	26	3.8	18.7	28 -19⅛
West Penn Electric	1.88	2.06	2.15	.59	.60	1.50[1]	27	5.5	12.5	29 -25½
Wisconsin Electric Power	2.31	2.36	2.44	.83	.84	1.60	32	5.0	13.1	37¼-30⅛

*—Based on 1956 earnings per share.
[1]—Indicated 1957 rate.
[2]—Plus stock.
[3]—12 months ended Mar. 31.
(n.a.)—Not available.

American G. & E.: Serving highly industrialized area, company builds large, super-efficient generating units. Aluminum companies moving into area. Company regarded as "growth" utility though increase in earnings below that of top growth companies. (H)

Baltimore G. & E.: Serving stable area, earnings have increased moderately in recent years, with gas division making good showing. High-grade equity with reasonable yield. (H)

Central & South West: Integrated southern holding company with good growth record, sound management. Increase in number of shares plus adverse weather may retard current earnings gains. (H)

Cincinnati G. & E.: Dividends paid 104 years, high equity ratio, good rating. Low payout currently, but dividends should improve (5% stock dividend last year). Advantageous rate agreement with City. (H)

Cleveland Elec. Illumin.: Operates at center of big industrial area. Payout relatively low, good equity ratio, but stock seems a little high currently in relation to earnings and dividends. (H)

Commonwealth Edison: Third largest electric utility with 67-year dividend record. Earnings stable past three years, growth rate not impressive. Moderate increase in earnings anticipated for 1957. (H)

Consolidated Edison: Largest electric-gas utility, with growth relatively slow. Share earnings up slightly in recent years, now bolstered by inclusion of deferred tax savings. Rate increase requested. (H)

Consumers Power Company: Large mid-western utility, operations reasonably diversified. Not much increase in share earnings in recent years, company has been building up equit ratio to 47%. (H)

Dayton Power & Light: Reasonably priced in relation to earnings, which have shown uptrend recently. Operations well diversified between industry and agriculture. 1-for-8 equity financing in February will temporarily dilute earnings. (H)

Detroit Edison: Serves highly-industrial area but also has large proportion of residential and farm sales. Share earnings in uptrend in 1952-55, but down slightly last year—uptrend now resumed. (H)

Duquesne Light: Serves highly industrialized Pittsburgh district. Liberal dividend payer, with good yield. Share earnings in modest uptrend since 1949. Company now handicapped slightly by adverse regulatory conditions. (H)

General Pub. Utils.: Good record of increasing earnings in recent years, aided by rapid growth of Philippine subsidiary. However, inflation and lack of foreign exchange in Manila are current adverse factors there. Earnings include deferred taxes. (N)

Illinois Power: Share earnings, which were irregular during 1946-54, have improved in the past two years. Stock has recently been "celebrating" 2-for-1 stock split. (H)

Middle South Utilities: Stock handicapped by rate problems last year, but substantial increase in earnings to around $2.50 expected this year reflecting some improvement in the Arkansas regulatory situation. (H)

New England Elec. System: While New England continues to show moderate industrial growth (despite continuing loss of textile business) NEES' share earnings have not shown much increase. Like other New England issues, stock offers attractive yield. (N)

Niagara Mohawk Power: Company suffered disastrous loss of big Schellkopf hydro units last June, is asking for rate increases to buttress declining earnings (which include deferred taxes). $1.80 dividend rate appears reasonably safe. Long-pull outlook seems favorable. (H)

Northern States Power: This important farm-area utility has enjoyed substantial postwar gain in revenues, and share earnings have shown moderate growth. Above-average yield and stable earning power. (H)

Ohio Edison: Rather heavy industrial load is partly balanced by farm business in outlying areas. Share earnings irregular during 1947-54 but have made good showing in past two years. (H)

Pacific G. & E.: Second largest electric-gas utility, growing very rapidly. With heavy equity financing and low return on investment share earnings were in irregular downtrend in 1946-51, but showed good recovery later. Currently handicapped by higher fuel costs, asking rate relief. (H)

Philadelphia Electric: Has enjoyed fair growth, and maintained sound equity ratio. Share earnings not especially impressive in recent years, but last year showed improvement. (H)

Public Service E. & G.: Gains in revenues favorable in recent years, but share earnings record disappointing. Territory well diversified. Attractive yield, stable market. (H)

Puget Sound Power & Light: This northwest utility, which used to war with PUD's, now follows "partnership policy." With very high equity ratio, no common stock financing needed for several years. With improving leverage, uptrend in share earnings maintained in past four years should continue. (H)

Southern Calif. Edison: Company has enjoyed tremendous growth in revenues, but share earnings in postwar period generally irregular with heavy extra expense for cycle change-over and bolstering of sinking steam generating plant. Now seeking $34 million rate increase to offset sudden increase in fuel costs. (H)

Southern Company: Excellent growth, particularly in recent years. Share earnings, irregular in 1947-51, have shown moderate uptrend in later years. Industrial growth in area expected to continue. (H)

Union Electric Co.: This former member of the North American Company System reported a slow but steady increase in earnings during 1952-5, which should be resumed this year. 1956 adversely affected by non-recurring factors. (H)

Utah Power & Light: Has enjoyed good growth. Share earnings, irregular in 1947-51, have improved in recent years. Growth outlook continues favorable and dividend increase seems likely. (H)

Virginia Elec. & Power: Company has good sales gains and in recent years share earnings and dividends have been in an uptrend, putting stock in "growth" list. Equity financing scheduled for June. Stock split recently. (H)

West Penn Electric: While not a growth stock in the usual sense, share earnings increased steadily in 1952-56. Stock offers unusually high yield considering its record, but has lagged behind group recently.

Wisconsin Elec. Power: Considered good investment issue, with sound equity ratio. While share earnings remained stable in 1946-54, they have shown fair-sized gains since last year. (H)

RATING—(H)—Hold. (N)—Neutral.

1956 Key Statistics and Ratios

	American Gas & Electric	Baltimore Gas & Electric	Central & South West Corp.	Cincinnati Gas & Electric	Cleveland Electric Illum.	Commonwealth Edison	Consolidated Edison
PLANT VALUE (MILLIONS) GROSS	$1,265	$428	$579	$330	$439	$1,563	$1,939
Depreciation Reserve	267	83	86	75	116	370	377
Net Plant Account	998	345	493	255	323	1,193	1,562
CAPITAL RATIOS (%)							
Funded Debt to Total Capitalization	56	49	52	48	43	51	49
Preferred Stock to Total Capitalization	10	8	13	11	8	3	11
Common Stock & Surplus to Total Capitalization	34	43	35	41	49	46	40
ANALYSIS OF REVENUES—ELECTRICITY %	100	70	100	62	96	100	80
Gas %	.....	28	.....	38	.....	.....	12
Miscellaneous %	.....	2	.....	.....	4	.....	8
INCOME ACCOUNT (Consolidated)							
Gross Revenues (Millions)	$ 268	$132	$128	$114	$112	$ 360	$ 522
Operating Expense (includ. purch. pow. & gas)	95	74[2]	41	60	43	147	221
Maintenance	22	.....	8	6	6	23	54
Depreciation	32	10	13	8	12	38	44
Taxes—Federal Income (includ. Deferred Taxes)	38	16	24	15	18	44	43
Net Operating Income (after all taxes)	58	20	33	18	22	64	76
Gross Income	60	21	33	19	22	66	76
Fixed Charges, etc.[1]	16	5	10	3	4	17	21
Net Income	44	16	22	15	18	49	53
EXPENSE RATIOS (%)							
Ratio Depreciation to Gross Revenues	12	7	10	7	11	11	9
Maintenance to Gross Revenues	8	.....	6	5	6	6	10
Combined Deprec. & Maintenance to Gross Rev.	20	.....	16	12	16	17	19
Operating Ratio (including taxes)	78	84	74	83	80	82	85
EARNINGS RATIO							
No. Times Fixed Charges Earned after taxes[1]	3.7	4.2	3.1	5.7	6.0	3.8	3.5
ANALYSIS OF ELECTRIC REV. (% of Total)							
Residential & Rural	33	34	37	35	33	34	34
Commercial	14	31	25	25	59[4]	29	54[4]
Industrial	40	34	27	29	.....	27	.....
Other	13	1	11	11	8	10	12
COMMON STOCK							
Dividend Pay-out %	70[3]	77[3]	69[3]	60	61	73	75

1—Includes interest on construction credit.
2—Includes maintenance.
3—Based on indicated 1957 dividend rate.
4—Combined commercial and industrial.
5—Includes other.

in business would naturally affect it moderately. Residential business increased in each year of the big depression except for a very slight decline in 1933 – though industrial sales declined more than one-third.

The utility companies are basing their construction plans over the years ahead on a continuation of the upward trend. The latest Electric Power Survey made by the Edison Electric Institute (preliminary) shows the following projections for the U.S., using December peak capabilities and loads and median hydro conditions:

	Millions KW		Annual Increases %	
Year	Capability	Peak Load	Capability	Peak Load
1955	116	98	—	—
1956	121	102	4%	5%
1957	131	113	9	11
1958	148	123	13	8
1959	160	132	8	7
1960	169	141	6	7

The benefits of this rapid growth have, however, been largely offset by steadily rising costs of fuel, wages and materials. Nevertheless, the utilities have been able to reduce the price of residential electricity (on an average kwh basis) year after year with scarcely any interruption. At the same time, and particularly during the postwar period, almost all the utilities have been able to show some increase in share earnings—and some companies enjoying a favorable regulatory "climate" have been able to show steady increases in profits for stockholders, with higher dividends almost every year.

How Utilities Have Increased Earnings

How have the utilities been able to produce these results? Increased efficiency through installation of new generating units, use of new accounting devices and introduction of new operating methods is the answer. With constant growth in demand for electricity they have been able to install more efficient

of Important Utility Companies

Consumers Power	Detroit Edison	Middle South Util.	Niagara Mohawk Power	Northern States Power	Ohio Edison	Pacific Gas & Electric	Phila. Electric	Public Service Elec. & Gas	Puget Sound Power & Light	Southern Calif. Edison	Southern Company	Union Electric Co.	West Penn Electric
$758	$929	$683	$929	$523	$555	$2,279	$927	$1,063	$125	$1,014	$1,047	$587	$532
120	165	124	227	102	104	439	191	228	16	166	189	133	128
638	764	559	702	421	451	1,840	736	835	109	848	858	454	404
46	55	54	51	44	44	46	46	53	40	48	54	54	52
13	......	11	14	21	16	20	12	8	......	15	13	13	16
41	45	35	35	35	40	34	42	39	60	37	33	33	32
66	98	84	80	85	98	65	83	68	100	100	100	94	100
33	......	10	20	14	......	34	14	32	......	......	......	3	......
1	2	6	......	1	2	1	3	......	......	......	......	3	......
$208	$237	$159	$244	$139	$129	$ 470	$225	$ 300	$ 25	$ 195	$ 227	$122	$132
102	109	63	115	58	42	170	91	133	10	67	84	47	49
10	17	10	19	7	9	15	18	28	2	12	14	11	10
19	20	18	19	12	14	45	25	23	2	20	29	14	13
31	24	20	14	19	24	66	36	32	3	27	33	14	16
37	41	30	39	26	29	99	44	46	6	43	49	25	28
38	41	31	39	26	30	100	45	46	6	44	50	27	29
6	11	9	11	5	5	23	10	13	1	11	20	7	7
31	29	20	28	20	25	76	35	32	5	42	30	20	18
9	8	11	8	9	11	10	11	8	7	10	13	12	10
5	7	7	8	5	7	3	8	9	7	6	6	9	8
14	15	18	16	14	18	13	19	17	14	16	19	21	18
82	83	80	84	81	77	78	80	84	75	78	78	79	78
5.8	3.7	3.2	3.6	4.3	6.0	4.4	4.4	3.6	5.5	4.0	2.5	3.9	4.0
41	38	35	31	43	38	45	34	35	56	42	35	35	39
24[5]	27	25	17	46[4]	22	45[4]	22	30	26	21	27	22	16
34	29	29	40	......	34	......	35	31	11	26	30	35	41
......	6	11	12	11	6	10	9	4	7	11	8	8	4
72[3]	85	73	84	74	70	71	77[3]	85	81[3]	69	71	89[3]	70[3]

generating units, and work these "round the clock" (except for necessary maintenance) while older and less efficient units are run only part of the time. The new units are much larger than the old and require less labor supervision in relation to output. In the accounting department bi-monthly billing has been substituted for monthly reading of meters, new accounting machines installed, and now the big new IBM electronic "brains" are beginning to take over almost the whole job. In maintenance work new mechanical devices have been introduced.

On the whole the utilities have been able to keep the total number of employees about the same year after year despite the rapid increase in output per employee. Thus with their comparatively low wage burden, utilities have been willing to follow the general practice of granting an increase of 4-6% in union wage rates annually, so that the number of strikes has been held to a minimum. *Consolidated Edison* at the end of last year had only 25,725 employees compared with 30,284 in 1948, though average weekly pay had been raised from $64 to $104. The total operating payroll in 1956 was only about 22% of revenues compared with 24% in 1948. Revenues per employee in 1956 amounted to $20,300 compared with only $12,200 in 1948.

The efficiency of new generating units is probably the greatest source of new economies. Back in the 1880's, when the industry was born in the old Pearl Street generating plant in New York City, it took ten pounds of coal to produce one kwh. About a decade later this had been reduced to 6.7, by 1912 to 4.4 and by 1922 to 2.5 pounds. From there on, progress was a little slower but by 1942 the figure had been cut to 1.5 pounds and in 1942 to 1.3 (very few new generating units were installed during the 1930s). By 1952 the amount was down to less than 1.1 and it is now probably close to .9. In the most efficient plants it is probably less than three-quarters of a pound.

American Gas & Electric has been a recent pioneer in developing this in- (*Please turn to page 366*)

The REVOLUTION in ROCKET FUELS

By HAROLD M. EDELSTEIN

High energy fuels are adding a new dimension to aircraft and missiles that may soon have us whizzing off on trips to the moon, or around the world in a fraction of time.

Just a few weeks ago, Olin Mathieson Chemical, long a leader in propellant research, released some details of its new boron-based fuels, and some implications of things to come that may have a resounding impact on future missile and jet engine development—may at least temporarily replace petroleum as a jet and missile fuel—and certainly should be a boon to the producers of borax, the formerly prosaic material of "Twenty Mule Team" fame.

Compounding fuels from light weight metallic elements has been a promising avenue of research for some time, but though propellants had been developed from lithium and beryllium, their high toxicity, basic instability and difficulty of control rendered them unusable outside the laboratory. The development of borane fuels by reacting boron compounds with lithium hydrides appear to answer many problems, but whether they will be the ultimate sources of rocket and jet power or an intermediate step along the developmental trail is not yet clear.

Olin is enthusiastic, however, and seems confident that the boranes may be utilized in the top-secret WS 110 "chemical" bomber currently being independently developed by Boeing and North American Aviation, and in guided missiles of the Bomarc, Navaho and Triton types. The implications of a "break through" may be misleading, however, since

researchers see many difficulties in powering manned aircraft with borane or similar fuels. The desirability is obvious, though, as boranes are much lighter in weight than petroleum fuels, burn with incomparable higher intensity, and freeze at much lower temperatures. They would deliver incomparably more power, and even as additives to JP-4, the most common jet fuel now used, would increase jet thrusts by as much as 40%—but they are dangerous and tricky to use. Furthermore, the tremendous heat generated can wreak havoc on metallic engine parts, as few alloys have been developed that can withstand xtra-high temperatures without melting or losing necessary properties. Metallurgical research has made rapid strides in the last two or three years, but the difficulties in developing adequate alloys is evident by the swing to ceramics for some engine parts, and the increasing interest in ceramets, produced by bonding certain metals and ceramics.

Last week, Corning Glass made news with the announcement of a new ceramic harder than steel for use in jet and missile engines, that can withstand temperatures up to 1300 degrees Fahrenheit. The material, interestingly enough has a boron base, demonstrating the versatility and mounting new uses of this mineral.

As jet fuels the boranes will probably be used first as additives to increase the power of standard jet fuels, but for rockets, a real breakthrough may have occurred. The metallurgical problem is not as serious in missiles since the parts need only last long enough for the projectile to reach its objective. Available materials are quite satisfactory for this purpose, although there is room for improvement in reducing the weight of component parts so that payloads and fuel capacity can be increased.

Liquid Fuels vs. Solid Fuels

As liquid fuels, however, the boranes sit right in the middle of the greatest controversy within the missile field, and their career as ultimate fuels will depend to a large extent on the outcome of the battle. Most of the major missiles now in production or in the planning stage are liquid propelled, but the solid fuels, pioneered by Thiokol Chemical, Aerojet-General and a number of oil companies, are making a serious bid for eventual dominance.

So far the solids can't match the power of the liquids, but they are much simpler, easier and safer to use. New developments are raising their thrust potential, but the solids have the additional disadvantage of little more than thirty seconds of operational life. The liquids require extremely complex engines and fuel control systems, adding considerably more poundage to the weight of the missile, but they pack the wallop to get the job done. Delivering the missile to its target efficiently and accurately is the most important consideration, and it is believed that boranes will have double the power potential of liquid fuels.

Aims of High Energy Fuel Research

The search for high energy fuels really centers around two separate problems. The first is to discover fuels with greater propellant energy when they are burned in combination with oxygen. A jet operates fairly cheaply because it utilizes oxygen from the air as part of its combustible mixture, but this reliance on oxygen limits the jet to within a few short miles of the earth's surface. The second is the quest for better combinations of fuels and oxidizers that will increase the power of rockets while reducing the weight of the fuel. Rockets carry their own oxygen with them as part of the fuel supply and have no earthbinding limitations.

Hydrogen is the ideal theoretical fuel, but it has numerous qualities that defy control. Beryllium and other metallic compounds burn with intense heat and deliver over 30,000 Btus per pound, but are so toxic and corrosive that they impose severe limitations on their use. The boranes also have a heat value of close to 30,000 Btus per pound, compared to 20,000 for JP-4 and have the added desirable property of combining readily with hydrogen and locking it into a liquid or solid state.

The search for new and better oxidizers is equally intense. Liquid oxygen is used almost exclusively today, taxing the capacity of the industry which is finding new markets outside of the defense program. The government has first claim on all liquid oxygen, but manufacturers are reluctant to raise capacity to meet peak government needs without assurances of a stable market for their output. Among the most promising alternatives are oxidizers derived from fluorine and chlorine but they are still highly toxic and are beset with technical difficulties.

All of the high energy programs are under tight security wraps, but enough hints have leaked out to indicate that borane fuels have been produced in pilot amounts and appear highly satisfactory, but there has been no clear-cut indication whether the progress applies to jet fuels, rocket fuels, or both. Apparently we are crossing the threshold into a new fuel era, but cost reductions will have to be substantial before the boranes or their successors can be used effectively for non-military purposes. Yet success is worth striving for, since despite the progress in atomic power development, nuclear energy propellants have not been perfected and will be at least as expensive as the new chemical fuels. Obviously the more substitute fuels we uncover and utilize the greater will be the conservation of our oil resources, which is something we must always consider because of the heavy demands for military and civilian use. Even a 10% substitution of metallic for petroleum based aircraft fuels is highly desirable.

Boranes and the Investor

With the stock market rocket conscious, news of boron fuels had an electrifying effect on some of the companies engaged in the program, but there has been little attempt to evaluate the profit potential involved. The principal borane researchers are Callery Chemical (25% owned by Gulf Oil), Olin Mathieson and the three producers of borax, U.S. Borax, American Potash & Chemical and Stauffer Chemical. Pennsalt is active in the search for better oxidizers derived from fluorine and chlorine, Allied Chemical is a large supplier of fluorine and is experimenting with analine as a fuel, and Aerojet-General, a division of General Tire & Rubber, in addition to its major role in engine and rocket production is a major fuel supplier, but there is no indication of its activity in the boranes.

Olin Mathieson has been in the vanguard of high energy fuel research since a pre-merger project sponsored jointly by Olin Industries and Mathieson

Chemical successfully developed hydrazine, one of the first of the rocket fuels, and established both companies as major fuel developers. Since the merger a 50% interest has been acquired in Reaction Motors, one of the grandaddies of the rocket industry specializing in liquid fueled engines– and a 25% interest in Marquardt Aviation, a leading jet engine developer. The three companies work hand in glove in an integrated rocket, fuel and engine research program through a joint operation designated OMAR. Reaction has a long string of firsts to its credit including the motors for Martin's Viking missile. Marquardt concentrates on ram-jet engines which require rocket boosters to help them attain the speed necessary for proper functioning and is an ideal research partner for Reaction. The company's latest ram-jets will be used to power the new Boeing Bomarc missile. Olin Mathieson supplies the fuel to round out the research programs.

Olin probably began in the boranes back in 1952 when it teamed with the Navy in project ZIP to develop high energy fuels that would outperform JP-4, the standard jet fuel. Last year the company was awarded an Air Force contract and construction was started on a $36 million borane research and production plant at Model City, near Niagara Falls, N. Y. Its cross-ties with Reaction and Marquardt place Olin in a favored research position, but interest in the boranes stems from more than military programs. Hydrazine turned out to have considerable value as a commercial commodity in addition to its rocket fuel uses, and Olin is obviously hoping to reap another windfall with the boranes, although it will take time to clearly define profit potentials of these products.

Interestingly enough, chemical companies have not been anxious to rush into the field. Olin has its hydrazine success behind it, but others want to be assured of more than unstable government demand for the products before undertaking expensive research and development projects without government aid. Chemical producers such as Allied and Pennsalt, active in chlorine and fluorine research as part of their usual programs are pressing oxidizer investigations, but they also envision substantial commercial outlets for the fruits of their labors.

Callery Chemical, a subsidiary of Mine Safety Appliances, and now 25% owned by Gulf Oil is the other major borane contractor. A $38 million plant is being built for the Navy at Muskogee, Okla., but few details have been released, except that its new fuels contain boron, hydrogen and carbon. The carbon content points to jet additives rather than rocket fuels, but the Navy is mum.

Bounty for Borax Producers

For the producers of borax, the current fuel excitement adds another windfall to a long list since World War II. The domestic industry produces 95% of all the borax consumed in the free world, and operates so cheaply that prices would have to skyrocket before competitive deposits could be brought into production. Research interest in boron compounds has been feverish and the new uses discovered have doubled borax production since 1946. Traditional users have been the glass, ceramics, pharmaceutical and cleansing compound producers, but with research programs in fuels, ceramics, atomic energy and alloys turning more and more to boron compounds there is no telling how far the demand will go.

The producers are taking no chances at being caught short, however and they are not waiting for others to develop new uses for the compounds. **U.S. Borax & Chemical,** the giant of the industry, accounting for 70% of total U.S. production, is in the midst of a $20 million conversion of its operations from underground to open pit mining. A new refinery is being constructed at the mine site that may increase output by 50% in its first year of operation, and a new $1 million research laboratory is about ready to go in the development of newer and more lucrative boron compounds. Already there is growing interest in boron's plastic and fire retarding properties and an attractive price structure ranging from approximately $37 per ton for commercial grade borax to a fantastic $40,000 per ton for elemental boron, although uses of the higher priced products are still measured in teaspoons.

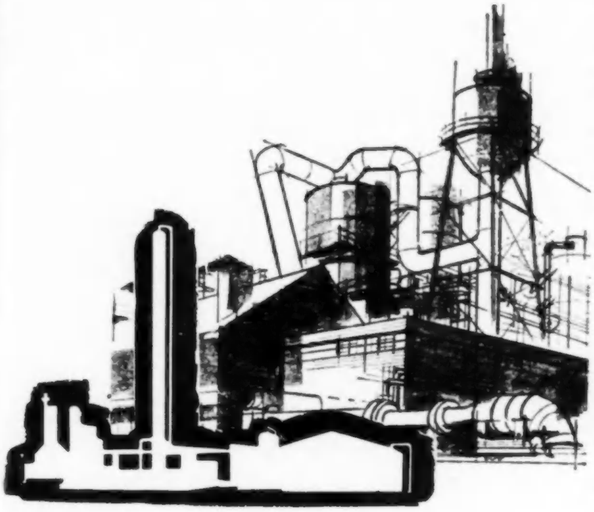
U.S. Borax is the product of a 1956 merger between the Pacific Coast Borax Company and U.S Potash Co. Pacific (a wholly owned subsidiary of Borax (Holdings) Ltd., a British holding company with borax and potash interests throughout the world), owned the world's most extensive borax deposits in Death Valley, California, but as a foreign held corporation reaped no advantages from United States depletion allowances, and was unable to qualify for secret government research project. The merger with U.S. Potash added about 50% to sales, but its most important result was the change in status to an American corporation despite the parent holding company's 70% stock interest in the new company.

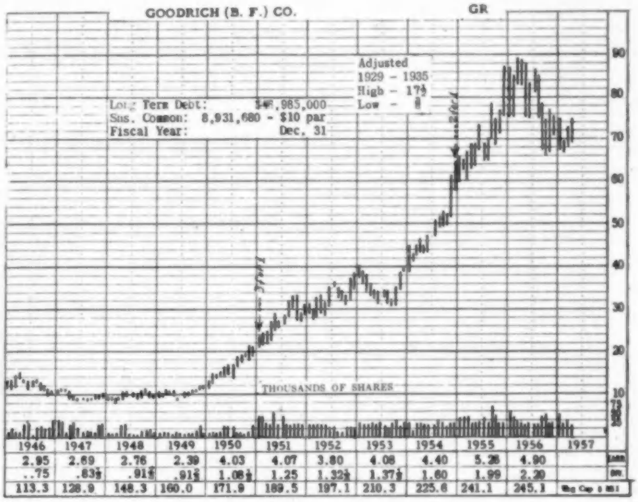
Pro-forma sales climbed to $50.5 million for the year ending September 1956, the last reported. Borax products accounted for $33.2 million and potash $17.2 million. However the rapid growth of borax sales from $19.6 million in 1952 compared with a potash sales advance of less than $2 million in the same period points to the greater borax potential. Net income for the year equalled only $1.47 per share compared with $1.28 a year earlier but the stock has been priced at a generous 40 times earnings since its recent listing on the New York Stock Exchange, obviously in anticipation of the greater production potential of its open pit mining and because of the excitement engendered in press releases regarding new boron-based fuels.

The balance of U.S. production is pumped out of the briny deposits of Searles Lake in California by American Potash & Chemical and Stauffer Chemical's West End Chemical Division. Production methods are cheaper than U.S. Borax's mining operations, but both Ampot and Stauffer have the added problem of separating the various components from the brine. Earnings from the deposits are conditioned, therefore by market conditions for soda ash, potash and other chemicals found in conjunction with borax.

Stauffer Chemical is primarily a heavy industrial chemicals producer with a sound agricultural chemicals sideline. Its merger with West End Chemical in October, 1956 assures it of a basic position in this fast growing chemical. By far the largest percentage of its research activities are devoted to the borons, including one project under government contract.

1956 was an average earnings year for Stauffer. Including West End's (*Please turn to page* 373)





5 STOCKS

—Right for Dollar Averaging

By OUR STAFF

We have received a wide response from our readers, following our article on Dollar Averaging under "Investment Clinic" in our May 25, 1957 issue. Therefore, for the benefit of our subscribers, we are now suggesting five stocks particularly suited to this method of investment.

To avoid any misunderstanding on the part of new readers, we may repeat a brief description of Dollar Averaging. This method is essentially a long-term program providing for investment, at regular intervals of time, of the same number of dollars in one or more stocks, regardless of price. If the amount invested is for example $1000 each year over a period such as 10 or 20 years, then some purchases will be made at relatively high prices and others at low prices. However, the $1000 will buy more shares at the lower prices, so that over the entire period the average cost per share will be lower than if "market averaging" were followed (i.e., buying the same number of shares each time that a stock declines a given number of points).

Thus, Dollar Averaging tends to offset market fluctuations and, when successful, results in a favorable average cost if you select the right kind of stocks. We believe that the five stocks now presented are good candidates for long-term Dollar Averaging.

B. F. GOODRICH CO.

BUSINESS: While fourth in size in the rubber industry, the company is outstanding in chemicals and plastics. Tires and tubes represent less than 50% of total sales. Other products include plastic resins and adhesives; rubber hose, belting, pipe and fittings; and latex mattresses, footwear and floor covering. Distribution is obtained in part through 500 owned stores. The company produces rayon and nylon tire cord. Goodrich-Gulf Chemicals, jointly owned with Gulf Oil, operates large synthetic rubber facilities. Goodrich has a 600,000 acre concession in Liberia to grow natural rubber.

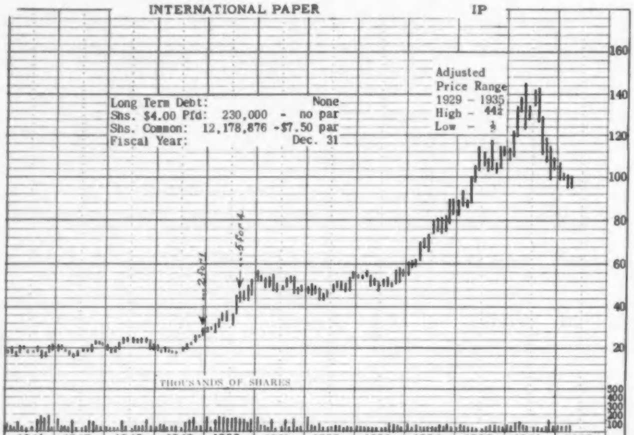
OUTLOOK: During postwar years, the company has established an enviable record of growth in its industry. In the 1946-56 period, sales substantially doubled, reaching $724.1 million last year, and net profit increased from $25.2 million to $43.7 million. After adjustment for stock dividends, earnings rose from $2.95 to $4.90 per share. This was due, in great part, to continuing emphasis on research and development of new products. Currently, the company has a new nylon tubeless tire with puncture-sealing and safety-tread features. It has discovered a cheaper way to produce synthetic latex used in foam rubber. Together with General Dynamics, it has developed a bonding cement to replace rivets in aircraft structures. Goodrich-Gulf Chemicals has begun pilot plant production of a new synthetic rubber that duplicates natural rubber. Truck tires made of the new material have been tested by the Army and found equal to real rubber tires. Last year, the company began a $200,000,000 5-year expansion program, including increased capacity to produce chemicals. In 1956, earnings declined slightly to $4.90 per share from $5.26 for the previous year. In the first quarter of this year, earnings amounted to $1.14 per share, or the same figure as a year ago. While the outlook for this year is one of relative stability—the position of the company and its outstanding management indicate above-average promise for the longer term.

DIVIDENDS: The company has paid dividends without interruption since 1939. Currently, quarterly payments are 55 cents per share.

MARKET ACTION: Present price of 73, compares with 1956-57 price range of High—89¼, Low—66. At current price, the yield is 3.0%.

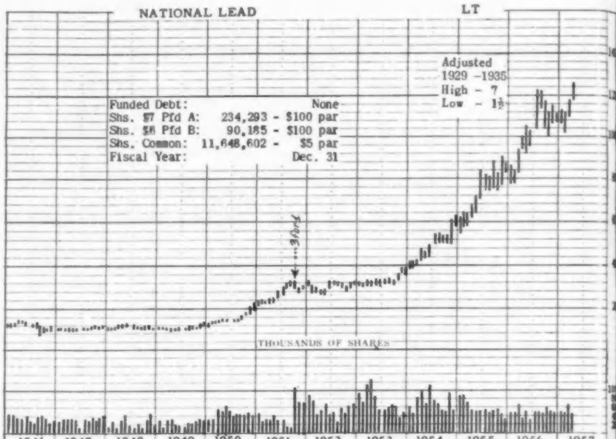
COMPARATIVE BALANCE SHEET ITEMS

	1947	December 31 1956	Change
ASSETS		(000 omitted)	
Cash and Marketable Securities	$ 42,446	$ 73,365	+$ 30,919
Receivables, Net	52,346	123,016	+ 70,670
Inventories	88,940	147,259	+ 58,319
TOTAL CURRENT ASSETS	183,732	343,640	+ 159,908
Net Property	75,122	151,447	+ 76,325
Investments & Receivables	2,713	21,834	+ 19,121
Other Assets	3,115	2,197	— 918
TOTAL ASSETS	$264,682	$519,118	+$254,436
LIABILITIES			
Bank Loans & Debt	$ 3,133	$ 1,727	—$ 1,406
Accounts Pay. & Accruals	25,294	49,784	+ 24,490
Tax & Renegot. Res.	26,354	46,986	+ 20,632
TOTAL CURRENT LIABILITIES	54,781	98,497	+ 43,716
Reserves	24,897	51,028	+ 26,131
Long Term Debt	43,232	46,985	+ 3,753
Preferred Stock	41,203	—	— 41,203
Common Stock	44,280	89,317	+ 45,033
Surplus	56,289	233,291	+ 177,002
TOTAL LIABILITIES	$264,682	$519,118	+$254,436
WORKING CAPITAL	$128,951	$245,143	+$116,192
CURRENT RATIO	3.3	3.5	+ .2



1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	
3.20	6.00	6.69	5.70	7.38	6.28	5.75	6.44	7.05	7.54	7.05		EARN
1.20	1.60	2.00	2.00	2.35	3.00	3.00	*3.00	*3.00	*3.00	*3.00		DIV
63.0	68.0	85.9	97.2	110.3	106.4	125.2	142.6	151.1	184.5	186.2	Wkg Cap $ Mil	

*—Plus stock dividend.



1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	
.82	1.09	1.21	1.29	2.41	2.05	2.06	2.58	3.05	4.02	5.23		EARN
.50	.66 2/3	*.41 2/3	.75	1.33 1/3	1.41 2/3	1.45	1.75	2.10	2.85	*3.25		DIV
55.8	60.2	63.7	62.5	75.0	67.5	69.1	91.8	104.5	113.1	117.4	Wkg Cap $ Mil	

*—Plus stock dividend.

INTERNATIONAL PAPER CO.

BUSINESS: The company is the world's largest papermaking organization. It has an entrenched position in the industry. The company owns or leases 21,000,000 acres of timberlands. More than half of its output consists of kraft paper and board, with the balance represented by newsprint, market pulp, and groundwood and other specialty papers (including book and bond papers). Fabricating plants produce shipping containers, insulating board, plywood, bags and milk containers. Acquisition of the Long-Bell Lumber companies last year extends the company's activities to the developing West Coast area.

OUTLOOK: In the 1947-55 period, sales and other income increased from $408.6 million to $799.5 milllion (excluding the Long-Bell Lumber companies). On the same basis, net profit rose from $54.3 million to $83.1 million. Similarly, earnings per share increased from $4.81 to $7.32, after adjustment for all stock dividends and the 2-for-1 stock split in 1949. Including the Long-Bell companies, sales advanced from $916.1 million in 1955 to $969.6 million in 1956, but earnings declined from $7.58 to $7.05 per share. The company's newsprint production is concentrated largely in Canada, near low-cost timber supplies, while kraft facilities are mainly in southern areas of the U.S., where large quantities of southern pine are available. International is now producing newsprint at its Mobile, Alabama plant. It has a large expansion program in other products. The Long-Bell companies, acquired last year, own 500,000 acres of timber, and produce lumber, plywood and processed wood products on the West Coast. The decline in International's 1956 earnings was due to rising costs and a leveling-off in demand in the last half of the year. The same factors brought about a drop in first quarter 1957 earnings to $1.49 per share, from $1.90 a year ago. The decline in the price of these shares may continue, since the immediate outlook continues clouded, with increased capacity and competition in the industry. However, longer term prospects are favorable, due to the basic uptrend in paper consumption.

DIVIDENDS: The company has paid continuous dividends since 1946. Currently, quarterly payments amount to 75 cents per share. Last year, a 3% stock dividend was also paid.

MARKET ACTION: Recent price of 103¼, compares with 1956-57 price range of High—144½, Low—94¼. At current price, the yield is 2.9%.

COMPARATIVE BALANCE SHEET ITEMS

	1947	December 31 1956 (000 omitted)	Change
ASSETS			
Cash & Marketable Securities	$ 21,842	$ 54,731	+$ 32,889
Receivables, Net	24,117	65,787	+ 41,670
Inventories	52,653	138,468	+ 85,815
TOTAL CURRENT ASSETS	98,612	258,986	+ 160,374
Net Property	147,733	455,625	+ 307,892
Investments & Funds	28,221	37,291	+ 9,070
Other Assets	4,020	13,577	+ 9,557
TOTAL ASSETS	$278,586	$765,479	+$486,893
LIABILITIES			
Notes & Accounts Payable	$ 12,907	$ 42,587	+$ 29,680
Accruals	7,746	20,665	+ 12,919
Tax Accruals	42,428	73,081	+ 30,653
U. S. Tax Notes	(dr) 32,530	(dr) 63,600	+ 31,070
TOTAL CURRENT LIABILITIES	30,551	72,733	+ 42,182
Reserves	32,264	33,492	+ 1,228
Preferred Stock	23,000	23,000	—
Common Stock	53,400	91,164	+ 37,764
Cap. fr. conv. of 5% Pfd.	40,430	40,430	—
Surplus	98,941	504,660	+ 405,719
TOTAL LIABILITIES	$278,586	$765,479	+$486,893
WORKING CAPITAL	$ 68,061	$186.253	+$118,192
CURRENT RATIO	3.2	3.5	+ .3

NATIONAL LEAD CO.

BUSINESS: The company has an outstanding position in lead processing, paints and titanium. While its lead requirements are largely purchased, it is fully integrated in the titanium field. Its wide range of other activities include fabrication of zinc and aluminum metal products; production of oil well materials and refractories, such as zirconium; refining nickel, copper and cobalt for the U.S. Government; and operating four uranium processing plants for the AEC. It is developing, jointly with Republic Steel, a new process to produce iron from a wider range of ore. It is engaged in various foreign operations, including Canada, Cuba and South America.

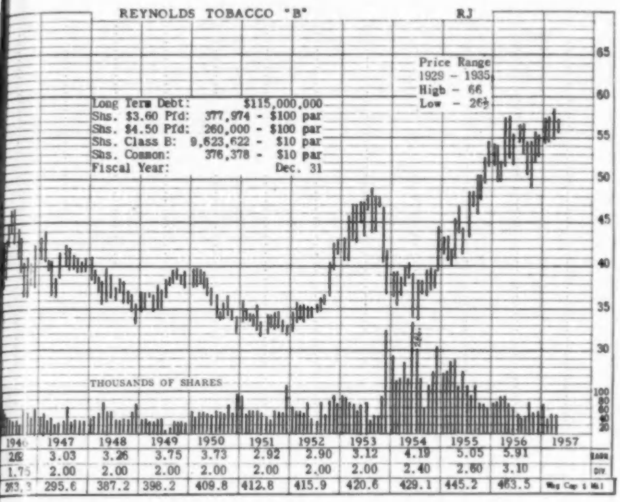
OUTLOOK: National Lead has an exceptionally strong growth record. Between 1946 and 1956, sales increased from $167.4 million to $576.2 million, thus more than tripling. In the same period, net profit rose from $9.6 million to $63.1 million, or more than six-fold. After adjustment for a stock split, earnings gained from $0.82 to $5.34 per share. The company has followed a well-managed program of expansion, diversification and research. Its products are used by numerous industries, including the automotive, aviation, ceramics, chemical, construction, electronics, paint, petroleum, plastics, printing, railroad and steel industries. Last year, the major part of the increase in sales occurred in newer product lines, largely developed or improved in the company's research laboratories. It has become an important supplier of various products for the atomic energy program, including lead, zirconium, nickel, cobalt and uranium. The production capacity of Titanium Metals Corp. of America, jointly owned with Alleghany Ludlum Steel, is being increased sharply. National Lead is continuing to expand in other fields. Last year, sales and earnings reached record levels. In the first quarter of this year, the company's products continued in strong demand, and earnings increased to $1.22 per share, from $1.13 a year ago. The longer term outlook points to continuing growth.

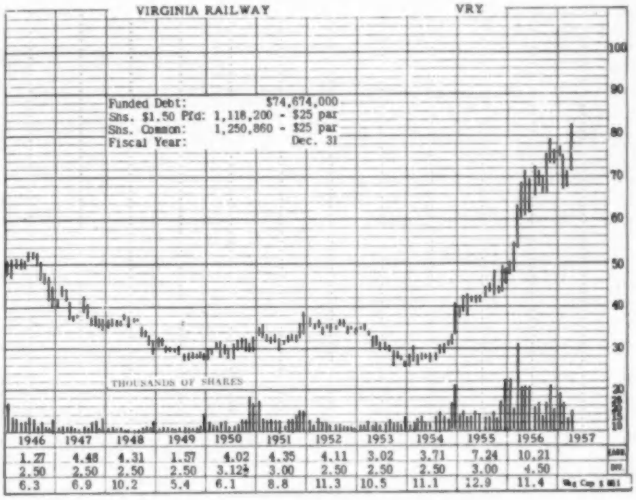
DIVIDENDS: The company has paid uninterrupted dividends since 1906. Currently, quarterly payments are 75 cents per share. Last year, total payments were $3.25 per share, including the $1.00 year-end dividend. Also, a 2% stock dividend was paid.

MARKET ACTION: Recent price of 135¼, compares with 1956-57 price range of High—137½, Low—76½. The yield on $3.25 dividend is 2.4%.

COMPARATIVE BALANCE SHEET ITEMS

	1947	December 31 1956 (000 omitted)	Change
ASSETS			
Cash & Marketable Securities	$ 24,454	$ 56,538	+$ 32,084
Receivables, Net	21,462	54,946	+ 33.484
Inventories	44,550	86,929	+ 42,379
TOTAL CURRENT ASSETS	90,466	198,413	+ 107,947
Net Property	44,639	106,693	+ 62,054
Intangibles	20,869	20,692	— 177
Investments & Adv.	5,329	22,991	+ 17,662
Other Assets	1,551	4,387	+ 2,836
TOTAL ASSETS	$162,854	$353,176	+$190,322
LIABILITIES			
Accounts Payable & Accruals	$ 12,770	$ 29,740	+$ 16,970
Tax Reserve	17,366	51,050	+ 33,694
Dividends Payable	116	135	+ 019
TOTAL CURRENT LIABILITIES	30,252	80,925	+ 50,673
Reserves	29,387	20,940	— 8,447
Preferred Stock	34,696	34,696	—
Common Stock	30,983	58,268	+ 27,285
Surplus	37,536	158,347	+ 120,811
TOTAL LIABILITIES	$162,854	$353,176	+$190,322
WORKING CAPITAL	$ 60,214	$117,488	+$ 57,274
CURRENT RATIO	3.0	2.4	— .6





R. J. REYNOLDS TOBACCO CO.

BUSINESS: Company produces the two largest selling brands of cigarettes in their respective fields, namely the regular size "Camel" and the king-size "Winston", a filter-tip cigarette. It also manufactures smoking and chewing tobaccos. Operations are highly efficient with production concentrated in Winston-Salem, N. C. plants, including production of aluminum foil for company use and auxiliary power plants. For many years "Camel" has held its leadership over all other cigarettes, while "Winston" attained first place in the filter-tip field in 1955, the year after its introduction.

OUTLOOK: To obtain a proper perspective, it should be recalled that the cigarette industry enjoyed an almost uninterrupted growth until 1953, when the first adverse health reports appeared. In that year, filter-tip cigarettes were first introduced. Since then, consumption of "filters" has increased to around 40% of the total cigarette market. Earnings of Reynolds Tobacco increased each year in the 1952-56 period. Between 1946 and 1956, sales rose from $613.1 million to $957.3 million, and net profit advanced from $27.9 million to $61.9 million. Earnings increased from $2.62 to $5.91 per share in 1956, a new record. Last year, the company introduced the "Salem", a king-size filter-tip cigarette with menthol flavor. Growth of the company's business necessitated a $9,000,000 expansion of facilities in 1956, with a $20,000,000 expansion planned this year. The tobacco aging process requires carrying large inventories and Reynolds, as in the case of other companies, has substantial bank loans. Reynolds spends large sums on advertising through all available media. In the first quarter of this year, earnings reached a new record of $1.47 per share, compared with $1.28 a year ago. The outlook favors continued moderate growth.

DIVIDENDS: The company has paid dividends without interruption since 1901. Currently 80 cents per share is paid quarterly.

MARKET ACTION: Recent price of 56½, compares with 1956-57 price range of High—58½, Low—49. At current price, the yield is 5.7%.

COMPARATIVE BALANCE SHEET ITEMS

	December 31 1947	December 31 1956	Change
		(000 omitted)	
ASSETS			
Cash	$ 9,659	$ 23,697	+$ 14,038
Receivables, Net	20,720	30,155	+ 9,435
Inventories	400,003	557,248	+ 157,245
TOTAL CURRENT ASSETS	430,382	611,100	+ 180,718
Net Property	24,969	45,011	+ 20,042
Investmen's & Funds	281	225	— 056
Other Assets	2,567	3,058	+ 491
TOTAL ASSETS	$458,199	$659,394	+$201,195
LIABILITIES			
Debt & Notes Payable	$102,000	$ 63,450	—$ 38,550
Accounts Payable	5,631	9,682	+ 4,051
Accruals	27,079	74,433	+ 47,354
TOTAL CURRENT LIABILITIES	134,710	147,565	+ 12,855
Long Term Debt	92,000	110,000	+ 18,000
Preferred Stock	49,000	75,000	+ 26,000
Com. & Cl. "B" Com. Stock	100,000	99,999	— 001
Surplus	82,489	226,830	+ 144,341
TOTAL LIABILITIES	$458,199	$659,394	+$201,195
WORKING CAPITAL	$295,672	$463,535	+$167,863
CURRENT RATIO	3.2	4.1	+ .9

VIRGINIAN RAILWAY CO.

BUSINESS: Virginian Railway operates about 611 mies of road, extending from the West Virginia coal fields to Tidewater at Hampton Roads, Va. Coal represents about 82% of total operating revenues. Through connections with other roads, Virginia has outlets to Great Lakes and Middle West consumer markets. The high-quality coking coal carried by the road is used widely by the utility, steel and other industries. The export market is large. Virginian Railway is partly electrified. Its high degree of operating efficiency has been improved by dieselization. While its debt is fairly heavy, the financial position is strong.

OUTLOOK: In the 1946-56 period, operating revenues increased from $24.8 million to $56.4 million, and net income rose from $3.1 million to $14.2 million. The increase in earnings per share was over eight-fold, namely from $1.20 to $10.08. The gain in earnings last year, from $7.12 per share in 1955, to $10 in 1956, was due largely to a 31% increase in coal revenues. This, in turn, was due almost entirely to more coal exported for European countries, only in part as a result of the Suez crisis. However, the road believes that Europe will look to America for needed coal supplies for years to come. Looking ahead to the St. Lawrence seaway, the road may benefit by this development through increased traffic with the Middle West area. Virginian received a 7% freight rate increase late in December, limited to 10¢ per ton on domestic coal and 5¢ on export coal. The Eastern roads have applied for a further increase. In the first quarter of this year, earnings rose to $3.30 per share from $2.29 a year ago. While the level of earning power depends largely on industrial activity, the prospect of long-term growth is good—although not without interruptions.

DIVIDENDS: Continuous dividends have been paid each year since 1935. Currently, the quarterly payments are $1.00 per share. A 2½ for 1 stock split will become effective on August 20th.

MARKET ACTION: Recent price of 83, compares with 1956-57 price range of High—83, Low—46⅜. At current price, the yield is 4.8%.

COMPARATIVE BALANCE SHEET ITEMS

	December 31 1947	December 31 1956	Change
		(000 omitted)	
ASSETS			
Cash & Marketable Securities	$ 8,460	$ 15,582	+$ 7,122
Receivables, Net	2,583	4,179	+ 1,596
Materials & Supplies	7,375	9,350	+ 1,975
TOTAL CURRENT ASSETS	18,418	29,111	+ 10,693
Road & Equipment	178,502	216,152	+ 37,650
Donations & Grants	(cr) 1,016	(cr) 1,840	+ 824
Accrued Deprec. & Amort.	(cr) 42,430	(cr) 54,498	+ 12,068
Investmen's & Funds	5,332	1,540	— 3,792
Other Assets	625	8,921	+ 8,296
TOTAL ASSETS	$159,431	$199,386	+$ 39,955
LIABILITIES			
TOTAL CURRENT LIABILITIES	$ 11,441	$ 17,675	+$ 6,234
Other Liabilities	035	040	+ 005
Unadjusted Credits	3,181	294	— 2,887
Long Term Debt	59,633	76,912	+ 17,279
Preferred Stock	27,955	27,955	–
Common Stock	31,271	31,271	–
Surplus	25,915	45,239	+ 19,324
TOTAL LIABILITIES	$159,431	$199,386	+$ 39,955
WORKING CAPITAL	$ 6,977	$ 11,436	+$ 4,459
CURRENT RATIO	1.6	1.6	–

FOR PROFIT AND INCOME

Seasonal Pattern

The history of the Dow averages shows past net gains and net losses evenly balanced in May for both industrials and rails. In the present instance, May brought a moderate extension of the market's considerable recovery swing from the February low, presumably with some resultant impairment of the technical position, which could be at expense of the June performance. The number of past June net gains has slightly exceeded that of declines. The "seasonal uptrend" tradition rests on the July-August record In both months, advances have exceeded the number of declines by a ratio of roughly two to one.

The Record

Measured from the May closing level to the July or August high of the industrial average, there have been gains in the great majority of past years, with the average such rise over the entire history of the average around 9.5%. But this amounts merely to averaging out wide differences, ranging all the way from a decline of 11.4% in the bear-market year 1930 to a rise of 72.1% in 1932 from an extremely depressed base. It need hardly be said that what may come in the period in any given year is sheer guesswork, and that investors can get little or no practical guidance from the past record. The market has returned to relatively high ground, and does not have generally dynamic earnings - dividend prospects to feed on. It seems a logical conclusion that a June correction is needed to sweeten up the technical odds in favor of July or August highs even moderately above the May closing level.

Stock Groups

In recent trading sessions up to this writing there have been no really decisive shifts of position among the more important stock groups. Which is to say that better-than-average or worse-than-average performances were only moderately so. Within these limitations, one can cite good action by such groups as coal, electrical equipment, finance companies, food brands, oil, paper companies, shipbuilding, steel and utilities; and the reverse by automobiles, copper, baking, machinery, dairy products, bank stocks, sugar, textiles and tires.

Strong

Whatever trend interpretation

INCREASE SHOWN IN RECENT EARNINGS REPORTS

		1957	1956
Cities Service Co.	Quar. Mar. 31	$2.27	$1.80
Ashland Oil & Refining	Quar. Mar. 31	.80	.59
Carpenter Steel Co.	Quar. Mar. 31	2.42	2.09
Mohasco Industries	Quar. Mar. 31	.37	.02
Smith-Corona, Inc.	Quar. Mar. 31	1.39	.92
General Cigar Co.	Quar. Mar. 31	.80	.57
Skelly Oil	Quar. Mar. 31	1.98	1.39
General Refractories	Quar. Mar. 31	1.48	1.14
Joy Mfg. Co.	Quar. Mar. 31	1.71	1.46
American Machine & Metals	Quar. Mar. 31	1.63	1.25

may be read into the pattern of the averages, some stocks are in individual bull markets, some in bear markets. It is, of course, conjectural whether and to what degree an established uptrend – as indicated by a succession of new highs –may be extended. But if not infallible, the odds as a rule certainly favor the holder of strong-company stocks which are performing well; and are against the holder of most stocks which are performing poorly, especially if they are equities of companies with drab or questionable prospects. Good-grade stocks with technically-indicated bull-market trends up to this writing include: Consolidated Natural Gas, Eastman Kodak, Middle South Utilities, National Lead, Northern Natural Gas, Standard Oil (New Jersey), Texas Company, Burroughs Corp., Southern Natural Gas, Air Reduction, Mead Johnson, McGraw-Hill, and Southwestern Public Service.

Soft

Stocks performing relatively poorly at this writing include Bulova Watch, American Crystal Sugar, Congoleum, Coty, Pacific Mills, Melville Shoe, Great Northern Paper, Industrial Rayon, American Airlines, Dunhill, General American Oil, United Air Lines, Acme Steel, Kress, Minute Maid, Consolidated Edison, Swift, Texas Gulf Sulphur, St. Joseph Lead, Public Service Electric & Gas, Roan Antelope, Spalding, American News, Hamilton Watch, Patino Mines.

Outdated?

If not outmoded, the old idea that low-priced stocks outgain high-priced stocks in a rising market is, on the whole, at least less valid than in earlier times. On average, the "little man" is less inclined to play the market than formerly, more interested in good-quality stocks, better informed. In price performance and activity, the "cat and dog" section of the market fared relatively less well in the bull market rise from the 1949 low than in the 1942-1946 bull market, or the 1932-1937 bull market, or the great 1923-1929 bull market. The big 1928-1929 splurge in low-priced speculations has never since been equalled, although it was approached fairly closely for a time in late 1945 and early 1946. Aside from the reduced role of the foolish, ignorant small speculator, the market is now more largely influenced by institutional funds and wealthy individual investors who have no objection to a high price if a stock appears to them to be a good value. To cite four recent examples of moves in high-priced from 1957 lows to recent high, International Business Machines rose about 20% to 345, Amerada Petroleum 31% to 136¾, Gulf Oil about 42% to 152 and Superior Oil of California 43% to 1,730. Against this, our weekly index of 100 low-priced stocks has so far risen less than 8% from its February low, and has yet to get back to where it stood at the start of the year. What you should emphasize is realistic appraisal of value in relation to the prevailing price. Otherwise, it is immaterial whether the absolute price is 10, 100 or 1,000.

Timken

Timken Roller Bearing is the largest maker of tapered roller bearings, widely used in automobiles, trucks, tractors, a variety of machinery and, to a lesser extent thus far, in railroad cars. It is also a sizable maker of high-grade steels, beyond the needs of its own integrated operation. Profit reached a record $9.13 a share in 1955, reflecting that year's strong automobile boom. It held at $9 a share last year, despite sharply lower automobile output, reflecting gains in bearings sales for machinery and freight cars; and apparently good profits on its sales of steel. Dividends last year were $3 regular plus $1 extra; and the regular rate was raised to $4 in March. Profit this year should be between $10 and $11 a share, total dividends at least $5. Earnings could readily reach or exceed $15 a share within a few years, allowing for indicated competitive gains; and growth of use of tapered bearings in the automotive, machinery and freight car fields. "Talked about" for years with minimum results, the railroad market appears at last to have been cracked, with a major spurt in 1956 sales therein. A new plant to build railroad bearings only, is near completion. They are much larger and higher in price than automotive or most machinery bearings; and hence can contribute importantly to longer-range sales and profit. The indicated potential in freight car bearings dwarfs the present rate of sales. The stock is selling at 100, about 11 times 1956 earnings, against a ratio of 15.1 for the Dow industrial average. It has been held back in the past by a management with old-fashioned ideas concerning stockholder and public relations, release of detailed operating information, etc. But now a 2-for-1 stock split is pending, the first since 1929; and so is a stock offering–the first in the company's history so far as the records show –to meet part of expansion costs. This makes all pertinent information public via the prospectus. In basic quality, the stock should rate a price earnings ratio much closer to the average of the 30 Dow industrials than it does now. We conclude that the split shares might, over a reasonably extended period, reach a level equivalent to between 150 and 200 for the present shares. "Might" and will being two different things, suffice it to say that the stock impresses us as a better-than-average buy for capital gain.

Speed-Up

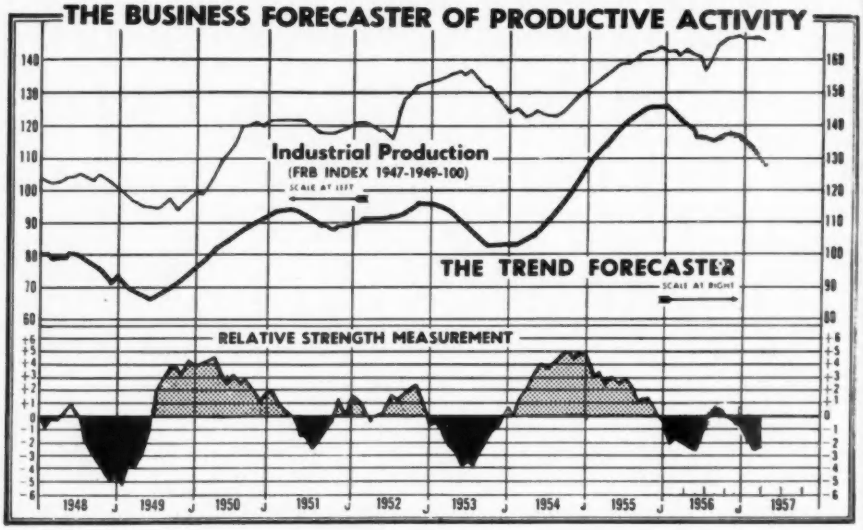
Over the five years 1952-1956, earnings of Mead Johnson increased 60% more than those on the Dow industrial average. Net on the latter might be up 5% or so this year. Based on trends indicated by the first-quarter report, Mead Johnson probably will net something like $3.40 to $3.60 a share, against $2.40 last year, which would be a gain of 40% to 50%. When we cited possibilities

(*Please turn to page* 380)

DECREASES SHOWN IN RECENT EARNINGS REPORTS

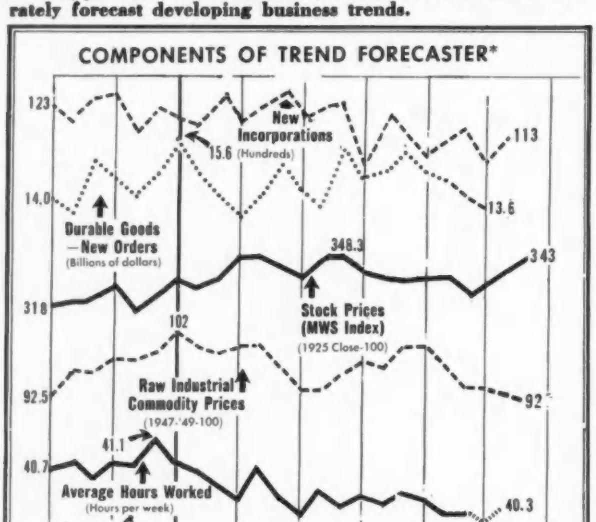
		1957	1956
American Radiator & S.S.	Quar. Mar. 31	$ .26	$ .48
Copper Range Co.	Quar. Mar. 31	.57	1.60
Jefferson Lake Sulphur	Quar. Mar. 31	.55	.92
Loew's, Inc.	16 Week Mar. 14	.18	.31
Holland Furnace Co.	12 Mos. Mar. 31	.43	1.08
Koppers Co., Inc.	Quar. Mar. 31	.78	1.54
Bangor & Aroostook R.R.	Quar. Mar. 31	2.38	3.50
Budd Co.	Quar. Mar. 31	.58	.88
Clark Equipment	Quar. Mar. 31	.52	1.13
General Tire Corp.	12 Weeks Mar. 23	.14	1.04

the Business



Business Trend Forecaster

*With the many revolutionary changes in our economy, it was evident that various indicators previously used should be dropped and new ones substituted, in order to more accurately forecast developing business trends.



*—Seasonally adjusted except stock and commodity prices.
(a)—3 month moving average.

This we have done in our new *Trend Forecaster* (developed over a period of several years), which employs those indicators (see Components of Trend Forecaster) that we have found to most accurately project the business outlook.

When the *Forecaster* changes its direction up or down a corresponding change in our economy may be expected several months later.

The depth or height of the developing trend is clearly presented in our *Relative Strength Measurement* line, which reflects the rate of expansion or contraction in the making. When particularly favorable indications cause a rise that exceeds plus 3 for a period of time, a strong advance in general business is to be expected. On the other hand, penetration of minus 3 on the down side usually precedes an important contraction in our economy.

We believe that subscribers will find our Business Trend Forecaster of increasing usefulness both from the investment and business standpoints.

Current Indications of the Forecaster

Thus far in the second quarter, preliminary figures for the components of the **Trend Forecaster** continue to show a mixed pattern.

In recent months, stock prices have risen markedly; average hours worked by factory employees have moved erratically; housing starts and new incorporations have strengthened; business failures have shown no clear trend, after their long downtrend of late 1956 and early 1957. On the other hand, commodity prices have continued to weaken, durable goods new orders have been in a more or less steady decline, and nonresidential construction contracts appear to have subsided.

Taking all of these trends together, the **Relative Strength Measurement** has moved into the second quarter on a plateau at the level of about —2.5. At this level, the implication is continuing weakness in general business conditions, but not necessarily imminent recession. For the past eighteen months, in fact, the **Relative Strength Measurement** has clung almost continuously to the negative area, suggesting persistent weaknesses in individual sectors which have never quite reached an intensity sufficient to produce a genuine business downturn. Throughout this period, the **Trend Forecaster** itself has been drifting almost steadily downward. However, as long as the rate of decline continues at its present slow pace, readjustment rather than recession is indicated.

Analyst

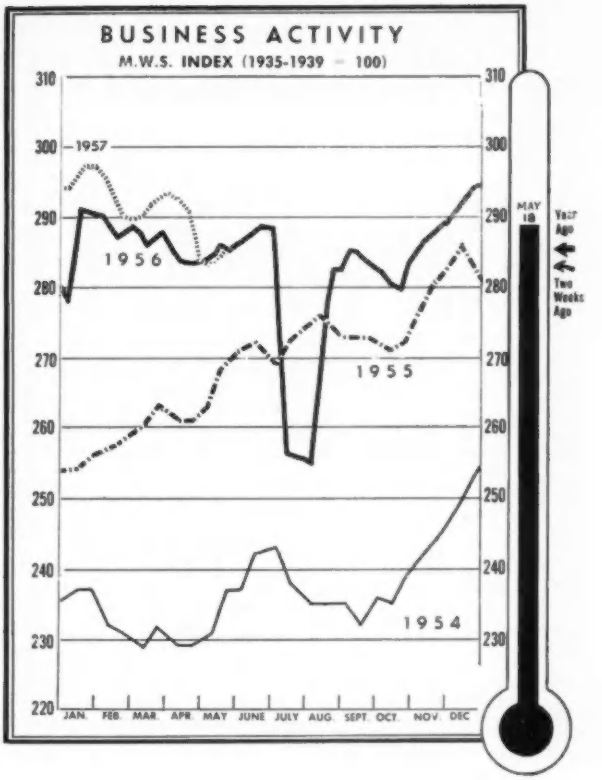
CONCLUSIONS IN BRIEF

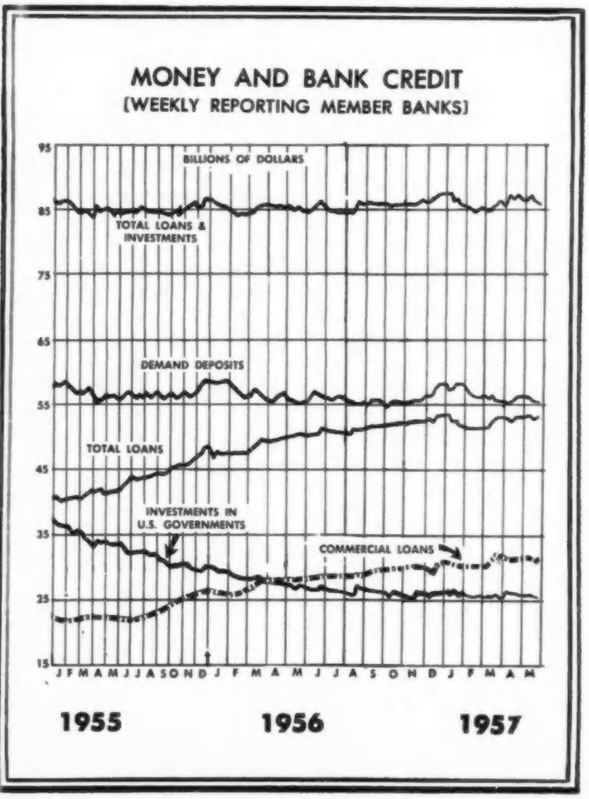
INDUSTRY—Production still off slightly, as steel, autos, appliances drift down. (Steel production has recently leveled off a bit, thanks mainly to some hedge buying against the coming price rise.) Factory employment still sagging slowly.

TRADE — Retail volume continues sluggish. March and April saw slight decline in dollar volume (after seasonal adjustment) but significant declines in terms of physical volume. No sharp change expected in next several months, but further weakening in auto sales a possibility.

MONEY AND CREDIT — Consensus of bankers now is that rates will stay at approximately their current levels for the next two quarters, with progressive easing in credit availability. Federal Reserve, still fearful of a new burst of loan demand in the fall, is likely to remain restrictive for several more months.

COMMODITIES — The downdrift is still on in a host of commodities (although steel scrap prices have started up) and purchasing agents report tough price bargaining gets results. Commodity price outlook: no general strength visible for at least three months.





In classical renditions of business cycle theory, commodity prices have always played an important role. Prices — of raw commodities in particular — represent, for classicists, the balance wheel of a national economy. And the same reasons that make them a balance wheel also make them a valuable indicator of the future course of business. For commodity prices measure the relative pressure of supply and demand; they describe, in their own special language, the adequacy of national capacity in the light of national spending.

For the past several quarters, commodity prices have been defying the general upward pattern of the wholesale and retail price indexes, in a most unusual way. And the price weakness of raw commodities has been fully borne out by the expressed attitudes of the men who deal practically with materials prices — the purchasing agents of the nation's large industrial enterprises. The views of these purchasing agents are accordingly worth close scrutiny. What they say is that **shortages are now a thing of the past in virtually all commodity lines.** Many of them even argue that the few commodities which are generally believed still to be in short supply — structural steel, oil-country steel, plates — are already in balance, or are rapidly moving toward balance. Outside of nickel and the rarer metals, purchasing agents are not only encountering no difficulty in getting their supplies; they are bargaining vigorously, and getting price concessions.

And because they find supply adequate and prices no longer rising, they are also willing to play their inventory coverage very closely — perhaps more closely than at any time since the end of World War II. This accounts for the extraordinarily slack demand *(Please turn to following page)*

Essential Statistics

THE MONTHLY TREND	Unit	Month	Latest Month	Previous Month	Year Ago
INDUSTRIAL PRODUCTION* (FRB)	1947-'9-100	Apr.	145	146	143
Durable Goods Mfr.	1947-'9-100	Apr.	161	162	159
Nondurable Goods Mfr.	1947-'9-100	Apr.	132	131	130
Mining	1947-'9-100	Apr.	129	133	129
RETAIL SALES*	$ Billions	Apr.	16.3	16.3	15.5
Durable Goods	$ Billions	Apr.	5.6	5.7	5.3
Nondurable Goods	$ Billions	Apr.	10.6	10.6	10.2
Dep't Store Sales	1947-'9-100	Apr.	122	127	122
MANUFACTURERS'					
New Orders—Total*	$ Billions	Mar.	27.8	28.2	26.9
Durable Goods	$ Billions	Mar.	13.6	14.0	13.3
Nondurable Goods	$ Billions	Mar.	14.2	14.2	13.6
Shipments*	$ Billions	Mar.	28.9	29.1	27.1
Durable Goods	$ Billions	Mar.	14.5	14.7	13.3
Nondurable Goods	$ Billions	Mar.	14.5	14.4	13.8
BUSINESS INVENTORIES, END MO.*	$ Billions	Mar.	89.0	88.9	83.8
Manufacturers'	$ Billions	Mar.	52.2	51.9	47.4
Wholesalers'	$ Billions	Mar.	13.1	13.1	12.6
Retailers'	$ Billions	Mar.	23.7	23.9	23.9
Dept. Store Stocks	1947-'9-100	Feb.	140	141	138
CONSTRUCTION, TOTAL	$ Billions	Apr.	3.5	3.1	3.4
Private	$ Billions	Apr.	2.4	2.2	2.4
Residential	$ Billions	Apr.	1.1	1.0	1.2
All Other	$ Billions	Apr.	1.3	1.2	1.2
Housing Starts*—a	Thousands	Apr.	940	880	1,157
Contract Awards, Residential—b	$ Millions	Apr.	1,232	1,107	1,345
All Other—b	$ Millions	Apr.	1,545	1,971	1,701
EMPLOYMENT					
Total Civilian	Millions	Apr.	64.3	63.9	64.0
Non-Farm	Millions	Apr.	51.6	51.4	50.8
Government	Millions	Apr.	7.4	7.4	7.1
Trade	Millions	Apr.	11.2	11.1	10.9
Factory	Millions	Apr.	12.9	13.0	13.1
Hours Worked	Hours	Apr.	39.9	40.1	40.3
Hourly Earnings	Dollars	Apr.	2.05	2.05	1.96
Weekly Earnings	Dollars	Apr.	81.80	82.21	78.99
PERSONAL INCOME*	$ Billions	Mar.	337.6	336.6	318.6
Wages & Salaries	$ Billions	Mar.	234	234	220
Proprietors' Incomes	$ Billions	Mar.	52	52	50
Interest & Dividends	$ Billions	Mar.	31	31	29
Transfer Payments	$ Billions	Mar.	20	20	19
Farm Income	$ Billions	Mar.	15	15	15
CONSUMER PRICES	1947-'9-100	Mar.	118.9	118.7	114.7
Food	1947-'9-100	Mar.	113.2	113.6	109.0
Clothing	1947-'9-100	Mar.	106.8	106.1	104.8
Housing	1947-'9-100	Mar.	124.9	124.5	120.7
MONEY & CREDIT					
All Demand Deposits*	$ Billions	Mar.	106.2	106.6	105.6
Bank Debits*—g	$ Billions	Mar.	77.4	80.3	73.9
Business Loans Outstanding—c	$ Billions	Mar.	31.4	31.6	27.8
Instalment Credit Extended*	$ Billions	Mar.	3.3	3.5	3.2
Instalment Credit Repaid*	$ Billions	Mar.	3.2	3.2	2.9
FEDERAL GOVERNMENT					
Budget Receipts	$ Billions	Mar.	10.7	6.2	11.3
Budget Expenditures	$ Billions	Mar.	5.6	5.7	5.4
Defense Expenditures	$ Billions	Mar.	3.8	3.5	3.2
Surplus (Def) cum from 7/1	$ Billions	Mar.	5.1	(0.5)	5.9

PRESENT POSITION AND OUTLOOK

for inventory, at a time when business sentiment continues relatively optimistic.

Under the current circumstances of easy raw materials prices and ready availability of practically everything, it is difficult to see how a new inventory boom can readily be born out of the present slow and careful rate of inventory liquidation. And without an inventory boom, business expansions tend to be moderate and deliberate, rather than sudden and inflationary. **Hopes for a snappy, energetic advance of business in late 1957 depend in some degree on inventory demand, and to that extent are probably headed for some disappointment.**

* * *

PERSONAL SAVNGS—it appears now to be in a slow, undramatic rise. The savings rate declined somewhat in the first quarter; incomes rose only slightly in that quarter, and personal spending rose relatively sharply, narrowing the saving gap. In the second quarter, the situation appears to be reversed; income is continuing up, but the gain in personal spending has evidently dragged to almost a complete halt. In fact, personal spending on goods (that is, excluding such service expenditures as rents, utilities, doctor and personal service bills, etc.) has been sinking slightly in the past few months, despite higher price tags on most products. This is not a buyer's strike against rising prices; it reflects, in the main, uncertainties connected with falling overtime and hence falling weekly wage checks. It also reflects the tremendous rate at which personal incomes are now preempted in advance by obligations on instalment loans and mortgages.

* * *

THE CONSTRUCTION PUZZLE—figuring out which way the giant construction industry is going remains one of the analyst's toughest jobs. At the moment, construction contract statistics are in limbo; you can get any result you want, depending upon what source you use. Even within residential housing, the indications are conflicting: housing starts themselves have recently turned slightly upward, but applications for FHA and VA financing, usually a good indicator of housing activity, are still woefully weak.

The best general description of building activity is that public contracts are still strong — notably for street and highway building, bridge-building, school-building. It remains slack for private construction; particularly slack for homebuilding, and far from sensational for industrial building. **Put it all together, and you have a**

and Trends

QUARTERLY STATEMENT FOR THE NATIONAL ECONOMY

In Billions of Dollars—Seasonally Adjusted, at Annual Rates

SERIES	—1957— I Quarter	—1956— IV Quarter	III Quarter	I Quarter
GROSS NATIONAL PRODUCT	427.0(e)	423.8	413.8	403.4
Personal Consumption	275.0(e)	270.9	266.8	261.7
Private Domestic Invest.	64.5(e)	68.5	65.1	63.1
Net Foreign Investment	3.0(e)	2.4	1.7	0.1
Government Purchases	84.5(e)	82.0	80.2	78.7
Federal	49.5(e)	48.3	47.2	46.1
State & Local	35.0(e)	33.7	33.0	32.6
PERSONAL INCOME	336.5(e)	333.2	327.0	317.5
Tax & Nontax Payments	41.0(e)	39.9	38.8	37.3
Disposable Income	295.5(e)	293.3	288.2	280.2
Consumption Expenditures	275.0(e)	270.9	266.8	261.7
Personal Saving—d	20.5(e)	22.4	21.4	18.5
CORPORATE PRE-TAX PROFITS*	46.5(e)	45.8	41.2	43.7
Corporate Taxes	23.5(e)	23.1	20.8	22.1
Corporate Net Profit	23.0(e)	22.7	20.4	21.6
Dividend Payments	12.3(e)	11.9	12.3	11.8
Retained Earnings	10.7(e)	10.8	8.1	9.8
PLANT & EQUIPMENT OUTLAYS	36.9(e)	36.5	35.9	32.8

THE WEEKLY TREND

	Unit	Week Ending	Latest Week	Previous Week	Year Ago
MWS Business Activity Index*	1935-'9-100	May 18	288.9	285.6	285.8
MWS Index—per capita*	1935-'9-100	May 18	220.6	218.0	221.8
Steel Production	% of Capacity	May 25	86.7	84.2	97.3
Auto and Truck Production	Thousands	May 25	158	163	139
Paperboard Production	Thousand Tons	May 18	287	291	286
Lumber Production	Thous. Board Ft.	May 18	256	254	255
Electric Power Output*	1947-'49-100	May 18	228.1	224.7	215.6
Freight Carloadings	Thousand Cars	May 18	723	723	779
Engineering Constr. Awards	$ Millions	May 16	358	385	300
Department Store Sales	1947-'9-100	May 18	120	133	129
Demand Deposits—c	$ Billions	May 15	55.1	55.3	55.0
Business Failures	Number	May 16	264	267	279

PRESENT POSITION AND OUTLOOK

standoff, with total construction in 1957 evidently about equalling the $45 billion total established in 1956.

* * *

PRODUCTIVITY—output per man-hour of labor input is evidently advancing sharply in 1957. In fact, the **productivity gain this year may yet turn out to be 1957's most sensational statistic.** By all indications, the relatively stable pattern of production, the lower amount of overtime, the huge level of expenditures on labor-saving equipment in recent years, and the better degree of training of the labor force are all combining to achieve one of the nation's historic jumps in manufacturing efficiency. If anything can be expected to brake the pace of price advances, of course, it is rising productivity of labor, since it has been higher wages per hour that has been responsible for much of the postwar price rise.

* * *

ANOTHER NOTE ON AUTOS — current sales rates of passenger cars will evidently permit the industry to produce at about a 1.5-1.6 million rate in the second quarter. But implied in that total is over 800,000 cars in dealer's stocks at mid-year. **The last half thus begins to shape up as another intense clearance problem for dealers — and a good time to buy a new car.**

*—Seasonally adjusted. (a)—Private starts, at annual rates. (b)—F. W. Dodge, for 48 states. (c)—Weekly reporting member banks. (d) Excess of disposable income over personal consumption expenditures. (e)—Estimated. (f)—Estimated by Council of Economic Advisors. (g)—337 non-financial centers. Other Sources: Federal Reserve Bd., Commerce Dept., Securities & Exch. Comm., Budget Bureau. (na)—Not available. (r)—Revised (I)—First Quarter.

THE MAGAZINE OF WALL STREET COMMON STOCK INDEXES

No. of Issues (1925 Cl.—100)	1957 Range High	Low	1957 May 17	1957 May 24
300 Combined Average	345.1	322.3	345.1	343.8
4 Agricultural Implements	282.4	257.9	268.8	268.8
3 Air Cond. ('53 Cl.—100)	122.8	110.2	121.7	118.2
9 Aircraft ('27 Cl.—100)	1388.8	1210.0	1281.2	1223.2
7 Airlines ('27 Cl.—100)	1002.5	782.0	802.0	782.0
4 Aluminum ('53 Cl.—100)	447.6	375.8	447.6	439.2
6 Amusements	172.6	151.8	169.6	166.7
9 Automobile Accessories	384.4	341.7	380.8	380.8
6 Automobiles	52.8	47.6	52.4	52.4
4 Baking ('26 Cl.—100)	28.9	26.3	28.1	28.1
3 Business Machines	1192.7	956.2	1172.1	1192.7H
6 Chemicals	616.4	556.5	616.4	616.4
4 Coal Mining	25.1	22.8	23.5	23.5
4 Communications	104.1	94.5	104.1	103.1
9 Construction	126.8	118.1	125.5	124.3
7 Containers	784.8	739.5	777.2	777.2
7 Copper Mining	307.6	258.9	268.0	268.0
2 Dairy Products	111.3	103.8	110.2	109.1
6 Department Stores	89.2	80.1	87.6	89.2H
5 Drugs-Eth. ('53 Cl.—100)	219.0	175.2	219.0	219.0
6 Elec. Eqp. ('53 Cl.—100)	237.6	215.0	237.6	237.6
2 Finance Companies	584.5	525.0	584.5	584.5
6 Food Brands	277.5	264.0	277.5	274.8
3 Food Stores	173.9	153.8	170.5	173.9H

(Nov. 14, 1936 Cl.—100)	High	Low	1957 May 17	1957 May 24
100 High Priced Stocks	233.6	215.6	233.6	232.3
100 Low Priced Stocks	415.8	387.6	406.1	400.7
4 Gold Mining	726.2	627.2	726.2	686.6
4 Investment Trusts	179.6	166.7	176.4	179.6H
3 Liquor ('27 Cl.—100)	1064.7	965.2	1054.7	1064.7
9 Machinery	523.4	477.2	518.2	513.1
3 Mail Order	174.6	162.6	166.1	164.4
4 Meat Packing	142.6	117.4	117.4	121.6
5 Metal Fabr. ('53 Cl.—100)	192.6	175.4	190.7	192.6H
10 Metals, Miscellaneous	420.9	384.5	412.8	392.6
4 Paper	1060.1	904.2	956.2	956.2
22 Petroleum	889.7	749.7	873.2	889.7H
21 Public Utilities	263.6	251.3	263.6	263.6
7 Railroad Equipment	91.4	82.7	89.6	88.7
20 Railroads	72.7	65.7	68.5	67.8
3 Soft Drinks	509.8	445.5	501.2	496.9
12 Steel & Iron	393.0	330.1	357.6	349.8
4 Sugar	115.0	97.9	113.1	111.2
2 Sulphur	916.3	815.4	882.6	874.2
11 Television ('27 Cl.—100)	35.6	31.6	35.6	34.9
5 Textiles	149.9	124.7	135.9	135.9
3 Tires & Rubber	186.4	164.0	186.4	184.5
5 Tobacco	91.3	87.0	88.7	88.7
2 Variety Stores	273.7	258.2	265.9	265.9
15 Unclassif'd ('49 Cl.—100)	167.4	153.8	167.4	167.4

H—New High for 1957. L—New Low for 1957.

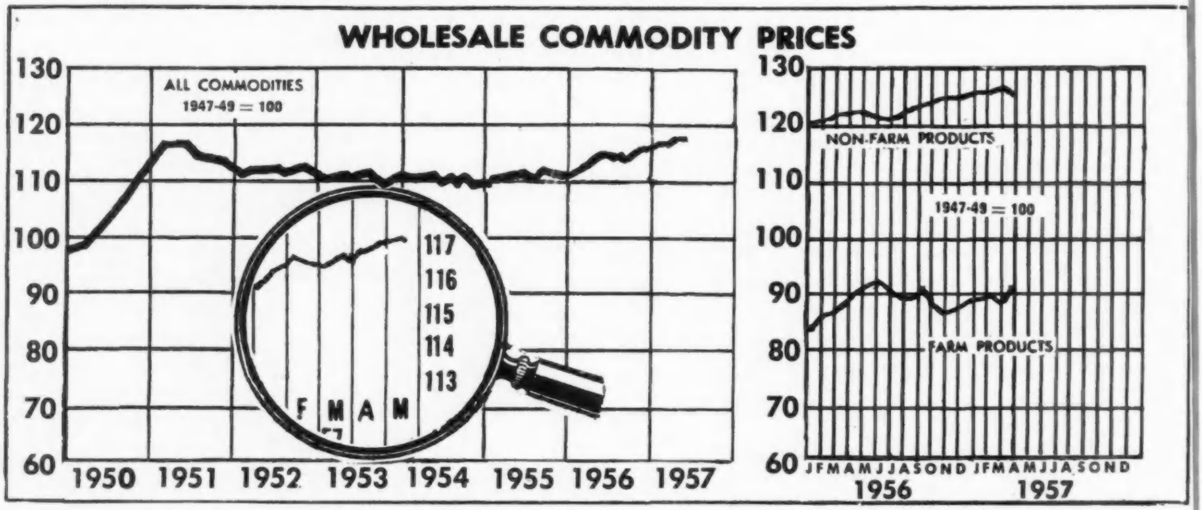
Trend of Commodities

SPOT MARKETS — Sensitive commodities were somewhat higher in the two weeks ending May 27, led by food and livestock products. The gain for the Bureau of Labor Statistics' index of 22 leading commodities amounted to 0.8% with foodstuffs up 1.1%. Industrial raw materials added only 0.4%, metals were off 0.2% and textiles held unchanged.

The gain in food prices in recent weeks has been of a seasonal nature and may continue for some time longer. Backwardness of industrial raw materials, on the other hand, reflects the slow-down in inventory accumulation that has been evident for some months. Stocks of goods remain high in many cases while sales are no better than stable. In the case of steel, some forward buying has been prompted by expectations of a price increase in mid-year, but even here, purchasers are buying warily.

FUTURES MARKETS — Futures prices followed divergent trend in the two weeks ending May 27. Grains and soybeans wer weak, wool and rubber were lower, but a long list of item including cotton, world sugar, hides, zinc, copper, cocoa an coffee, sought higher levels. The last two were especially stron with cocoa advancing more than 4 cents and coffee some 2 cent higher.

Wheat prices gave ground easily during the period and th September option lost 5¼ cents to close at 206. Crop prospect are still improving and end-season "free" supplies should b ample. Foreign crops appear to be in good condition dampen ing the outlook for exports. Wheat prices at present are som 12 cents under loan levels but past experience indicates this i no guarantee of price firmness.



BLS PRICE INDEXES 1947-49—100	Date	Latest Date	2 Wks. Ago	1 Yr. Ago	Dec. 6 1941
All Commodities	May 21	117.1	117.2	114.4	60.2
Farm Products	May 21	89.6	89.7	90.9	51.0
Non-Farm Products	May 21	125.2	125.3	121.7	67.0
22 Basic Commodities	May 27	88.4	87.7	88.6	53.0
9 Foods	May 27	82.4	81.5	81.3	46.5
13 Raw Ind'l. Materials	May 27	92.6	92.2	93.9	58.3
5 Metals	May 27	102.8	103.0	117.6	54.6
4 Textiles	May 27	84.0	84.0	79.1	56.3

MWS SPOT PRICE INDEX

14 RAW MATERIALS

1923-1925 AVERAGE—100

AUG. 26, 1939—63.0 Dec. 6, 1941—85.0

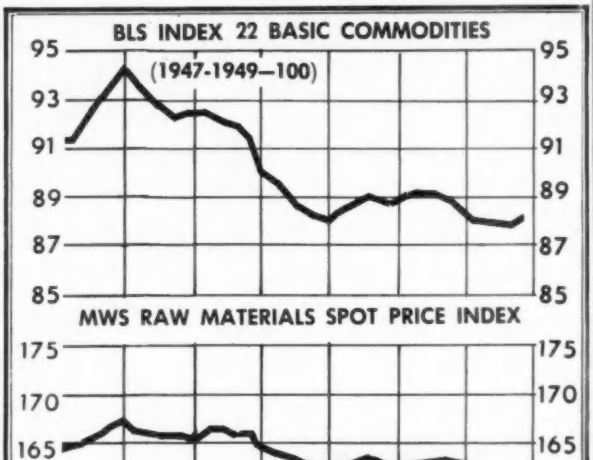
	1957	1956	1953	1951	1945	1941
High of Year	166.3	169.8	162.2	215.4	98.9	85.7
Low of Year	160.4	163.1	147.9	176.4	96.7	74.3
Close of Year		165.5	152.1	180.8	98.5	83.5

DOW-JONES FUTURES INDEX

12 COMMODITIES

AVERAGE 1924-1926—100

	1957	1956	1953	1951	1945	1941
High of Year	163.4	166.7	166.5	214.5	106.4	84.6
Low of Year	154.5	149.8	153.8	174.8	93.9	55.5
Close of Year		162.7	166.8	189.4	105.9	84.1



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The Personal Service Department of THE MAGAZINE OF WALL STREET *will* answer by mail or telegram, a reasonable number of inquiries on any listed securities in which you may be interested or on the standing and reliability of your broker. The service in conjunction with your subscription should represent thousands of dollars in value to you. It is subject to the following conditions:

1. **Give all necessary facts, but brief.**
2. **Confine your requests to *three listed securities* at reasonable intervals.**
3. **No inquiry will be answered which does not enclose *stamped, self-addressed envelope.***
4. **No inquiry will be answered which is mailed in our postpaid reply envelope.**
5. **Special rates upon request for those requiring additional service.**

Revere Copper & Brass, Inc.

"I have been a subscriber of your magazine of long-standing and would appreciate receiving data on Revere Copper & Brass, particularly its entry into the aluminum field and also indicate sales and net income of the company." *B. I., Bath, Me.*

Net income for 1956 of Revere Copper & Brass, Inc. totaled $9,590,309, or $3.66 per share on the 2,619,073 shares of common stock outstanding. This compared with the 1955 net income of $11,281,984, or $4.35 per share on the 2,590,992 shares of common stock then outstanding, after giving effect to a 2-for-1 split of common stock on April 23rd, 1956.

Sales for the year amounted to $250,489,010, as compared with $242,680,892 in 1955, an increase of $7,808,118, or 3.22%. The company earned 3.83% on its net sales in 1956 as compared with 4.65% in 1955.

Revere will begin to receive aluminum in some quantities in the first quarter of 1958 from the Olin Revere Metals Corp. which was organized by Revere and Olin Mathieson Chemical Corp. on August 28, 1956 for the purpose of producing primary aluminum. The new company is expected to be in full production by January 1, 1959. As an integrated company in the aluminum industry, Revere will enhance and support its aluminum production and sales activities and thus will increase its long-term profit potentials.

For 1957 the overall picture at present would appear to indicate a somewhat lower poundage of output than in 1956 for copper and brass and a somewhat higher one for aluminum and, possibly, manufactured goods. On the whole, the company expects 1957 to be a satisfactory year.

Net sales for the first quarter of 1957 were $53,880,421 and net after taxes was $2,372,590 equal to 90¢ per share based on 2,615,390 shares outstanding. This compares with first quarter 1956 when net sales were $71,674,336, net after taxes $3,052,265, equal to $2.34 per common share on 1,301,941 common shares then outstanding.

Dividends in 1956 totaled $2.10 per share and 55¢ quarterly has been paid thus far in current year.

May Dept. Stores

"Please indicate the localities of the May Department Stores Company stores, and what were its recent earnings and what is the outlook for the current year?" *I. C., Columbus, Ohio*

The May Department Stores Co. operates ten downtown stores and 23 branches in the following areas: Akron, Ohio; Baltimore, Md.; Cleveland, Ohio: Denver, Colo.; Los Angeles, Calif.; Pittsburgh, Pa.; St. Louis, Mo.; Sioux City, Iowa; Youngstown, Ohio; Canton, Ohio; and Sharon, Pa.

Net income of the May Department Stores Co. rose 6.8% in the fiscal year ended January 31, 1957 on an increase of 5.5% in net sales.

Consolidated net sales went above the half-million dollar mark for the first time and totaled $521,444,000, compared with $494,366,000 in the previous year.

Net earnings totaled $20,786,000, equal to $3.31 per common share after deducting preferred dividends, compared with $19,457,000, equal to $3.10 per common share in the year ended January 31, 1956.

Sales prospects for the current year obviously will be affected by the cross-currents of general economic conditions, so that it is difficult to forecast for the whole year. However, May Department Stores estimates a sales increase in the first-half of about 3%. Sales volume from branch stores will play an increasingly important part in the over-all sales picture as branches now under construction begin operating, and as the suburban areas in which they are located grow in population.

Company feels that downtown stores will continue to be profitable and they will be the heart of May's business for many years to come.

The company last year spent $13,335,000 on land, buildings and equipment and expenditures this year are budgeted at $20,000,000. The May Co. in Los Angeles will open its new branch in the company-owned Eastland Shopping Center at West Covina, Calif., this fall. Also to be opened this fall is the first suburban branch of the company in Cleveland. Construction is expected to start this fall on the 6th branch store of the Los Angeles May Co. It will be located at Redondo Beach, Calif.

The 55¢ quarterly dividend is expected to continue and this yields an excellent income return.

END

Varying Outlook for Utilities

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creased efficiency, and President Sporn is regarded as the foremost research leader in reducing generating costs, developing high-tension transmission facilities and other efficiency measures. Ohio Power Company, a subsidiary of American G. & E., now has in operation a new 125,000 kw steam generating plant which is the first to use super-critical temperatures and pressures. This new coal-burning unit uses boiler pressure of 4500 psi, and temperatures of 1150 f. It requires only .65 pound of coal to generate one kwh. The new plant is small compared with new units running as large as 450,000 kw because of its partially experimental nature.

The new unit is expected to lower the operating (not overall) cost of producing electricity from 3 mills to around 2.2 mills or better. The new unit heats water to the point where it vaporizes, instead of turning into steam. Some authorities think that the pressure can eventually be pushed up to 5,000 or 6,000 psi. Since the new units don't cost much more per kwh to construct than the old, it is obvious that a great forward step has been achieved in increasing the efficiency of coal-burning plants. Ebasco Services, in an independent study, thinks that efficiency will be increased about 12% in the decade 1956-65.

Changing Character of Utility Operations

The use of new appliances is changing the operating character of the industry. Thus, many utilities (particularly in the south) with heavy air-conditioning load now have their annual peak demand in the summer instead of in the winter. The heat pump—a central unit which can be placed outside the home if desired, heating the entire house in winter and cooling it in the summer—is now being mass produced and is becoming increasingly popular. *Florida Power Corp.*, which has pioneered in promoting heat-pumps, now has some 3,767 installed in its area, more than in all the rest of the United States. The company states: "These impressive figures reveal that our intense promotional efforts have really paid dividends. The heat-pump is not only a welcome convenience for our customers, but is an excellent load factor."

In the north the heat-pump is less efficient on very cold days, but some utilities are experimenting with the use of supplementary resistance heating to maintain efficiency on cold days. In the Pacific Northwest where residential rates are extremely low due to cheap hydro power, *Washington Water Power*, with over 7,000 electrically-heated homes in its area, has decided to promote electric space-heating more actively despite potential competition from natural gas, recently introduced into the Northwest.

Other "gadgets" which will build future loads are color TV (using more current than regular TV) and the new electronic range. Electric driers are growing in use fast, though they may meet some competition from gas driers. Then there are the electric garbage disposal units, dehumidifiers, electric fryers, knife sharpeners, and can openers.

Utility Financing Under Tighter Money

Some investors have been concerned over rising money rates and their effects on the cost of utility financing, and hence on earnings. Last year utility stock prices were depressed by the rise in money rates, but apparently this year investors' fears have relaxed – many utilities have made new highs recently despite the fact that money rates have risen again. One reason why the utilities are not hurt very much is that their financing programs are flexible. During a time like the present, with common stock conditions favorable and the bond market unfavorable, they can issue more common stock and do less senior financing. Also they can go to the banks temporarily, and refund the loans at a later date when conditions are improved. Sometimes they can also refund high-coupon bond issues, as was done very heavily in the 1940s and on a smaller scale in some later years.

The utilities can "generate" more internal cash nowadays, thus reducing the amount of public financing necessary. This is due to the large tax savings resulting from the use of accelerated amortization and (more recently) accelerated depreciation. To these savings are added the regular depreciation charges, miscellaneous amortization items, and retained earnings, the total "cash flow" being substantial. The electric utilities can now probably finance over 40% of their new construction without selling securities or borrowing from the banks, and in time this may increase to 50%. If construction programs were reduced drastically (as occurred in the 1930's) very little financing of any kind would be required.

The above doesn't mean that inflation won't hurt, when it comes too fast. If the cost of boiler fuel jumps sharply it may affect utility net rather seriously. For this reason many utilities have automatic adjustment clauses in their rate structures to cover changes in the fuel costs, so that rates can be lowered or raised without going to their state commissions for approval.

Contrasts in Rate Regulation

The situation varies from state to state. Utilities in Florida are well protected in this respect, but on the other hand those in California, where the regulatory situation is unfavorable, have enjoyed very little of this protection. Earnings of California utilities are now in a downtrend due to the rising price of oil and gas, while the net income of Florida companies continues to gain sharply. *Southern California Edison* expects its earnings to drop from last year's $3.48 to about $3.10 this year (for the 12 months ended March, earnings had already dropped to $3.20) and *San Diego G. & E.* foresees a decline from $1.51 to $1.35. Most of the large utilities in the state, with the exception of San Diego, are asking for rate increases—Southern California Edison wants $34 million a year – but it will take time for the commission to hear these pleas. Had the commission allowed the companies to have automatic adjustment clauses these difficulties would have been avoided.

Rate increases are also being sought by some other companies, notably *Niagara Mohawk Power*

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Varying Outlook for Utilities

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whose earnings are affected by the loss of its big Schoellkopf hydro plant at Niagara Falls last June. The company has asked for rate increases equivalent to about 50¢ a share to restore lost earning power. *Central Maine Power* asked for an increase last June, which was denied, and a Court appeal seems likely. *New England Electric* is asking for a small increase—a little under $3 million. *Middle South Utilities* is getting some rate relief, after some adverse decisions earlier in the state of Arkansas.

Despite higher fuel costs the utilities are still making a good showing with increases in net income. The latest industry figures (published by the Federal Power Commission) are for February and March, which showed the following percentage increases over the same months of 1956:

	February	March
Electric Revenues	6.8%	6.2%
Electric Revenue Deductions	6.6	6.0
Fuel Expenses	11.7	12.8
Other Operating Expenses	3.0	3.6
Depreciation	7.4	8.0
Taxes	7.7	4.1
Gross Income	9.2	7.6
Net Income	10.3	8.5

Regional Conditions for Electric Power Companies

NEW ENGLAND	New England's first quarter business made only a fair overall showing. Use of electricity is currently running about 4% over last year compared with the U.S. average gain of 6%. The transition from textiles to diversified industries continues, with non-farm workers slightly above last year in number. Regulation remains unfavorable on balance, with adverse decisions in Maine and New Hampshire.
MIDDLE ATLANTIC	Some difficulties are reported with the St. Lawrence Waterway Project, and Congress is still reluctant to give the go-ahead signal to Robert Moses of the New York State Power Authority to begin construction of the big hydro project at Niagara Falls. Regulation continues "tough" in Pennsylvania, and "irregular" in New York and New Jersey. Increase in electric output is about 5% over last year.
CENTRAL INDUSTRIAL	Business seems a little slow because of lagging automobile production, but this may be stimulated by General Motors' Fiftieth Anniversary new models in the fall. Electric output is running about 4% over last year.
WEST CENTRAL	Conditions look better in the farm belt, with farm income bolstered by soil bank payments and other Federal largesse. Rising food prices are also benefitting the farmers, and the outlook seems good for improvement in farm income this year, and larger sales of farm implements. Electric output is running 7% over last year.
SOUTHEAST	This dynamic section continues to forge ahead, with recent sales of electricity 8% over last year. The gains are most evident in the seaboard states, particularly Florida. The issue over further TVA expansion in Tennessee is still unsolved at Washington. Regulation continues to be very favorable in Florida, moderately adverse in Mississippi.
SOUTH CENTRAL	Recent floods and storms have apparently slowed activity slightly, and output is running only 4% over a year ago. Utilities now have less irrigation load. With the Suez problem over, oil output is easing somewhat and electric sales for pumping are probably lower. Regulation seems generally favorable in Texas, bad in Louisiana, irregular in Arkansas.
ROCKY MOUNTAIN	In this huge but sparsely settled area, which contributes only 4% of total U.S. electric output, conditions seem to be slowing moderately, with electric output less than 3% over last year. However, growth remains rapid in Arizona and New Mexico. The issue over Hells Canyon continues to occupy the public power group at Washington, but Idaho Power is moving fast to complete its first dam.
PACIFIC NORTHWEST	The political-labor spotlight has been on Portland and Seattle. Output in this area is dependent largely on the weather, since there is very little steam generation of electricity, and is running nearly 7% over last year. A number of big hydro projects, several of them representing "partnership projects" between public and private power agencies, are before the FPC for approval, and are favored by over 80% of the people recently polled. In general the outlook seems good.
PACIFIC SOUTHWEST	In California growth continues rampant and electric output in the week ended May 18 was more than 9% over last year (in the previous week 12%). However, the rapid rise in oil and gas costs are hurting utility earnings, and bad or uncertain regulation includes prolonged regulatory lag in some cases. With the state commission almost newly constituted, there are hopes of improvement if the anti-utility staff can be brought under control.

Estimating Future Earnings

The electric utilities prepare annual budgets around the end of the year, forecasting revenues, expenses and earnings for the coming year. Some of them are willing to issue their estimates of share earnings. Some of the "growth utilities" early this year expected to show the following gains in share earnings for the calendar year 1957 as compared with 1956:

American G. & E.	11%
Arizona Public Service	7
Central Louisiana Electric	11
Delaware Power & Light	17
Florida Power Corp.	11
Middle South Utilities	15
Southwestern Public Service	10

Other growth companies such as Florida Power & Light, Houston Lighting, Texas Utilities and others will doubtless also show substantial gains this year, though they did not release definite forecasts.

It is becoming essential to analyze the makeup of utility share earnings more closely, due to differing policies with respect to handling "deferred taxes". A minority of those companies which have adopted "accelerated depreciation" under the 1954 Tax Code are carrying tax deferrals (temporary savings) down to net income, while others "normalize" earnings by inserting a special bookkeeping charge for "deferred taxes". Among the companies whose earnings for 1956 were increased by carrying the savings to net income were Connecticut

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Varying Outlook for Utilities

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L. & P., Hartford Electric Light, Consolidated Edison, Niagara Mohawk, New York State Electric & Gas, Potomac Electric Power, Rockland Light & Power, Gulf States Utilities, El Paso Electric, Montana Power, and probably some others.

There is another interesting item in the income statement which will bear watching—the interest on construction credit. This is a bookkeeping item which the utilities have adopted to normalize earnings in periods of heavy construction, when fixed charges and dividend requirements increase sharply although the new funds are tied up in property under construction. The interest credit usually reflects an arbitrary "return" of 5 or 6% on these tied-up funds. If construction expenditures drop in the following year, however, the credit will drop also, and if new property doesn't bring in earnings as soon as it gets into operation, share earnings will then suffer. Hence if interest on construction is unusually large, some inquiry should be made as to whether this will continue. Among some of the larger 1956 credits on a per share basis (the list is not complete) are New England Electric System, Public Service E. & G., Long Island Lighting, Duquesne Light, Rochester G. & E., Consumers Power, Northern Indiana P.S., Central Illinois Light, Washington Water Power and California-Oregon.

Atomic Power in the Utility Picture

What about atomic energy as a factor in future earnings power of the utilities? Almost all the electric utilities are either members of some group which is planning to build an atomic reactor, or of research organizations which are keeping abreast of developments. AEC Chairman Strauss has predicted that within 20-25 years about one-third of electric output should be from nuclear reactors. The first important plant to be completed, the one at Shippingport, Pennsylvania—will sell its energy to Duquesne Light, but due to the fact that this is one of the earliest "models" the electricity thus produced will be very expensive. More efficient units will be constructed by Consolidated Edison, Commonwealth Edison, Detroit Edison, Yankee Atomic and others with substantially lower costs, but they may not be competitive with the latest fuel-burning plants. (Commonwealth has in the past said that its plant could compete, but there now seems to be some doubt.)

Other plants are projected which may do even better, but it will be a matter of years before the latest type reactors can probably compete intensively with coal-burning units. As we noted above, the efficiency of the latter is increasing steadily, and the atomic reactors will have to make fast progress to catch up with the fuel-burners. In New England where fuel costs are high—and possibly in California if present trends should continue—the atomic reactors may prove economical sooner than elsewhere. Meantime the utilities are holding back somewhat with real construction —sites are being prepared—until Congress passes the necessary

legislation to provide insurance up to half a billion dollars to take care of possible explosions which might spread radioactive material. Private insurance companies will loan up to $70 million but this is not considered enough.

Meanwhile, some definite progress has now been achieved with the new fusion process (the hydrogen bomb principle) as contrasted with the fission process (the older atomic bomb method). The Atomic Energy Commission has hundreds of scientists at work trying to harness the immense power generated by the fusion of light atoms, and the progress made thus far is "top secret". Recently Chairman Strauss lifted the veil slightly and announced that a new "stellerator" is being built at Princeton to contain the immense heat of the gas (a hundred million degrees centigrade) necessary to trigger the fusion process. It may take many years to develop a successful, practical method of perfecting this tremendous energy. But fusion is much better than fission because it is virtually non-poisonous and would use much cheaper and more plentiful fuel – deuterium (double weight hydrogen) which the ocean contains in almost unlimited amounts.

Recently eleven Texas utilities formed the Texas Atomic Energy Research Foundation, which signed a four-year research contract with General Dyanmics Corp. to work with the AEC in attempting to control thermonuclear (fusion) reactions. The AEC will cooperate by giving General Dynamics access to some of its own research. The eventual goal is not merely to produce tremendous heat for conversion into electricity, but also to *produce electricity directly* without having to use the conventional steam-operated generator.

Divergent Status of Utility Shares

Utility stocks which last year were adversely affected by rising money rates and a weak bond market, have proved immune to this bad influence recently. Utilities have joined with industrials in an almost uninterrupted although moderate advance since early February. The growth stocks have been particularly strong, advancing about 20% from the February lows and forcing price-earnings ratios to around the 20-21 level. While the stocks of the Texas and Florida companies may still be valid purchases for long-term holding, they do not now look attractive as near-term holdings.

However, it isn't always necessary to buy the "rapid growth" utilities. There are other growth stocks in the list which seem priced reasonably in relation to earnings, such as Arkansas-Missouri Power, Central Hudson Gas & Electric, Central Illinois G. & E., Citizens Utilities, Community Public Service, General Public Utilities, Kansas G. & E., Madison G. & E., Missouri Public Service, Western Light & Telephone, Southern Nevada Power, etc. These companies have shown interesting increases in share earnings in recent years without achieving definite status as high-multiple growth stocks—some of them are rather small or obscure. In the Pacific Northwest it is hard to choose between three semi-growth stocks—Puget Sound P. & L., Pacific Power & Light and Washington Water Power. Careful analysis of some of these stocks might prove rewarding to the investor. —END

Over Industrialization Causing Food Shortages and Inflation in Agricultural Economics

(*Continued from page* 345)

dismantling controls – needed to keep the Argentine economy functioning in the last years of the Peron Era – is now being carried out by the provisionary government which took over from Peron. It is a thankless job, partly because the strongly unionized industrial labor force has no intention of making sacrifices.

Industrialization Causes Distortions in Brazil

Over-rapid industrialization in Brazil did not cripple the country's foreign exchange earning capacity, although exporters of coffee, cocoa, and cotton are confronted with rising costs at a time when competition in world markets is getting stiffer. However, the influx of workers to the cities in search of better-paying jobs denuded rural areas of farm labor, and farm output in general failed to keep up with the food requirements of the fast growing cities. As a result, food prices rose sharply and quickened the pace of inflation.

Yet Brazil could have avoided the food bottleneck. With a land area larger than that of the United States, it could easily feed itself and even contribute substantially to food supplies of other countries, provided its farmers could be weaned from inefficient cultivating methods and supplied with more up-to-date equipment. The improvement of marketing facilities is another "must" if Brazil is to solve its food bottleneck. It is estimated that the lack of highway and railway transportation facilities prevents at least a quarter of the over-all output from reaching the market.

The Five-Year Development Program which the present Kubitschek Administration is endeavoring to carry out will remedy some of these maladjustments. The present highway and railway systems are being modernized, storage facilities are being built in rural areas, and priority is being given to imports of tractors and other farm equipment.

The Case of Colombia

Colombia is another country where progress has been temporarily halted because of unbalanced growth of the economy. The phenomenal coffee boom of 1954, which lifted the price of the Colombian coffee to almost one dollar per pound, was followed by a period of over-industrialization and an investment boom. The country began to live beyond its means and imported heavily even though the coffee bulge collapsed. As in Brazil, domestic food output failed to keep up with the demands of the expanding urban centers. As a consequence, food prices have been rising, and with them, costs and wages.

As in so many other countries, industrialization in Colombia has made it difficult to adjust imports to the earning power of the export industries. This is because the bulk of imports now consists of industrial raw materials and capital goods, rather than consumer goods or consumer durables. With imports now reduced to about half of what they were in 1955 and during the first half of '56, Colombia now has the problem of keeping her facotories supplied with materials and equipment, and of avoiding urban unemployment.

Balanced Economy Sought in Mexico

Mexico was one of the first Latin American countries to industrialize and, likewise, to experience the mixed blessing of one-sided development. After a decade of unprecedented development, 1941-1951, during which the country provided itself with a great array of industrial establishments, Mexico discovered that many of its factories worked only part-time, simply because the domestic market could not absorb the production. At the same time, because of creeping inflation, it was increasingly difficult to sell abroad the products of Mexican mines and agriculture. In view of this, the Government of President Ruiz Cortinez decided to go somewhat more slowly on industrialization and to spend its limited capital where it would bring a quicker return – in agriculture and mining. At the same time, it was decided to cut spending on these projects which were slow in bearing fruit or yielded meager results, so as to reduce the gap between invest-

ment and production return.

The decision to put a brake on industrialization and to push agriculture and mining has already brought nice dividends. Agricultural production has since been rising steadily, and cotton and coffee have become important foreign exchange earners. All in all, prospects have now improved sufficiently to attract foreign investors.

* * *

After a decade of experimenting with industrialization, and reaping a harvest of balance-of-payments difficulties and inflationary pressures, many countries all over the world are heading for a period of consolidation. Their growth may be somewhat less vigorous in the future, but is likely to be better balanced. Among others, Australia, Mexico, Chile, and even Turkey—are approaching equilibrium again, and it will be possible for the American businessman and investor to take another look at the opportunities that these countries have to offer. —END

The Revolution in Rocket Fuels

(*Continued from page* 352)

figures, sales rose to new high levels of $159 million, an 8% increase over the 1955 revenues. Net earnings progress was more modest, however, coming to $3.97 per share compared with $3.91 a year earlier. Margins were adversely affected by higher labor, materials and freight costs, and by the higher unit costs arising from lower volume output from several plants. Furthermore, weak prices for agricultural chemicals offset sales increases in other lines.

The softer trend continued into the first quarter of 1957. Price increases in several lines were not enough to overcome weaknesses elsewhere and sales fell 2% behind the year earlier initial period. Increased research and depreciation expenditures contributed to an earnings dip to 90¢ from 95¢ a year ago. However, the first quarter brought forth the announcement of a new titanium production process that may be applicable to other light metals such as columbium, tantalum and zirconium.

Though current earnings are unexciting, Stauffer is on the ground floor of the budding boron industry and is making important contribution to other fields. Small, but aggressive, it is a company to watch.

American Potash & Chemical, the second largest producer of borax, probably has the most extensive research program in the industry. Its Whittier Laboratory was doubled in size in 1956 to handle a mounting research budget that amounted to 3.7% of Ampot's sales in 1956. The lion's share is going into boron research with substantial success already reported.

The importance of fuel research is pinpointed by Ampot's acquisition of National Northern Corp. on January 11, 1957. National conducts laboratory studies and pilot production tests of explosives and propellants for military and commercial use. In the defense program, Northern participated in the Navy's JATO (Jet-assisted take off) program, tested

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sounding grenades for the Aerobee rocket, and is actively engaged in several top-secret projects. Research in propellants, aside from the borane fuels, centers around the use of ammonium perchlorate, another of Ampot's products, as an oxidizer for solid rocket fuels.

Sales bounded to $41.5 million in 1956 from $27.7 million in 1955. Net income, at $5.1 million was the highest in Ampot's history. Per share earnings, after adjustment for a 2½-for-1 split in April, 1956, equalled $2.64 against $2.45 the previous year. Sales are well diversified among a number of industries including paper, glass and enamel producers. Defense industries accounted for 25% of sales.

In the initial 1957 quarter, sales continued their upward thrust, rising 15% over year earlier figures. Net earnings climbed 6%, but per share earnings were down a few cents from the 70¢ of a year ago only because there were 269,000 fewer shares outstanding at that time. The first quarter also marked the beginning of actual borane fuel production at the Henderson, Nevada pilot plant, and an Atomic Energy Commission contract for lithium reactor coolants, awarded to American Lithium Chemicals, an Ampot subsidiary.

American Potash appears to be in a decided growth phase. Earnings improvement has been consistent in the last few years, reflecting the growing importance of the company's new product development, and management's alertness in entering new and promising fields early. A boom in borax would lead to substantially higher earnings.

Boron research is still in its infancy and no one company can be considered far ahead of the field, but the producers of the basic material bear watching. Borax production is on the upgrade whether borane fuels prove usable or not, but full profit potential will be a long way off as current earnings are dampened by high research expenses —END

As Government Resorts to Financing by Expedients

(*Continued from page* 336)

has been paying 3-3¼ per cent to sell its 91-day Treasury bills, the Canadian Government has been paying 3¾ per cent on its bills. The Bank of Canada's flexible discount rate is around 4 per cent, against the 3 per cent Federal Reserve discount rate. Yields on Canadian bonds run anywhere from ½ to 1 per cent higher than in the U. S.

Meanwhile, Canadian borrowers have been taking every opportunity to finance at lower cost in the U. S. market. The volume of Canadian bond offerings in the U. S. rose from $100 million in 1955 to $600 million in 1956 and is pointed even higher in 1957. The roster of borrowers reads like a list of blue chips: Aluminum Company of Canada, Quebec Hydroelectric Commission, British Columbia Power Commission and innumerable others. Only a few weeks ago the City of Montreal announced that it was rejecting an interest cost of no less than 6.12 per cent on a projected borrowing in Canada and would seek cheaper money in the U. S.

Interest Cost on the Public Debt

Interest rates in the U. S. are lower than in Canada, or in most other countries. But no other nation in the world comes near matching the size of the $274 billion U. S. public debt. Thus, no other government pumps out so much in interest each year as does Uncle Sam.

The President's January budget message estimated the interest cost of the debt at $7.2 million in current fiscal 1957 and $7.3 billion in fiscal 1958. This is the highest figure on record, up $1.5 billion or 25 per cent since fiscal 1952, as the accompanying table shows. We are now spending more to service the debt than the total of all federal budget spending as recently as 1937.

Over the longer period the main factor behind the climb of interest costs to successive new peaks is the tremendous increase in the size of the debt which came with depression deficit financing and World War II borrowing. In 1930 the federal debt was only $16.0 billion.

But, as the table shows, the bulk of the increased cost of the debt in recent years stems from the sharply higher interest rates that have had to be paid. In May for example the Treasury had to offer 3½ and 3⅝ per cent rates to refinance notes it had sold in 1954 at a 1⅝ per cent interest cost. Even though the debt outstanding on June 30, 1957 is figured to be about $700 million lower than it was June 30, 1954, interest payments on the debt are calculated $800 million higher. The average interest rate on the debt was 2.73 per cent on April 30 against 2.34 per cent June 30, 1954. It may be noted that this is still well below the cost of current financing, reflecting lots of debt still on the books at old cheap money rates.

With tight money expected to continue, the chances are that the $7.3 billion budget guess at the cost of the debt in fiscal 1958 is on the low side. Merely refinancing old debt will raise the average interest cost. As the table shows, the average interest rate rose from 2.58 per cent June 30, 1956

Public Debt Problems and What To Do About Them

THE COST OF THE DEBT

(Dollar Figures in Billions)

Fiscal Years Ended June 30:	Interest Payments	June 30 Avg. Interest Rate	June 30 Gross Public Debt
1946	$4.7	$2.00	$269.4
1947	5.0	2.11	258.3
1948	5.2	2.18	252.3
1949	5.4	2.24	252.8
1950	5.7	2.20	257.4
1951	5.6	2.27	255.2
1952	5.9	2.33	259.1
1953	6.5	2.44	266.1
1954	6.4	2.34	271.3
1955	6.4	2.35	274.4
1956	6.8	2.58	272.8
1957 est.	7.2	2.73 (Apr. 30)	270.6
1958 est.	7.3		269.2

to 2.73 per cent April 30, 1957. A similar increase in the coming year could raise the fiscal 1958 interest cost on the debt closer to $7.8 billion.

This is the sad reality of a $270-odd billion public debt for a country which, unlike the Soviet Union, holds firmly to its promise to honor its obligations.

Disturbed, among other things, by the great increase in the cost of carrying the public debt, the Senate Finance Committee on April 12 announced that it would undertake a broad-gauged study of the "financial condition" of the U. S. Topics tentatively scheduled to be taken up include taxation, the public debt, debt management policies and monetary policies influencing interest rates and the availabilty and distribution of credit.

This could be an extremely valuable study. There is general agreement that we ought to take a fresh look at our monetary and fiscal institutions, with a view to updating them to current conditions.

The danger is that political considerations may lead the study to focus narrowly on the effects of high money rates on the cost of the debt. It would be a pity if the result were one more repetition of the threadbare argument that the Treasury's interest costs could be kept down if the Federal Reserve money managers would only cooperate.

We have gone down this dead-end street before. There is no doubt that the Federal Reserve could keep rates low for the Treasury, at least for awhile. It did so in the war and postwar years up until 1951. The trouble was that it could not make money cheap for the Treasury without making it cheap for everybody. And cheap money for everybody meant free and easy spending, even though supplies of goods were limited and prices were rising out of hand. Inflation was the result. The entire economy paid a price in terms of the reduced value of the dollar saved and earned far in excess of any conceivable saving to the Treasury in interest cost.

Chairman Martin of the Federal Reserve Board, testifying before Congress last December, pointed out that a Federal Reserve credit policy designed to keep interest rates down could only be inflationary under current conditions. He noted that every 1 per cent rise in the BLS

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As Government Resorts to Financing by Expedients

(*Continued from page* 375)

Consumer Price Index costs the American consumer something like $2.5 billion. Even with a restrictive credit policy in force the Consumer Price Index has risen a full 3.8 per cent in the past year. We will never know how much it would have risen under an easy money policy.

Clearly, keeping interest rates artificially low by flooding the economy with cheap Federal Reserve credit is no way to save money for the American people.

The Root of the Problem

The plain fact of the matter is that the public debt, and the costs it involves, will be with us as long as we take no effective action to cut the debt down. Our economy, richer and more productive than any other in the world, has enjoyed more than a decade of unprecedented prosperity. Since June 30, 1946 the Federal Government has collected the fantastic total of $593 billion in taxes. Yet the public debt on June 30, 1957 will be no lower than it was on June 30, 1946.

The only sound way to reduce our public debt problems is to reduce the public debt. This means nothing less than cutting back the swollen level of Federal Government expenditures. There is no other way to release tax revenues for needed debt retirement.

The vigorous way in which Congress has been slashing the President's 1958 budget requests lends basis for hope that we are finally recognizing necessity to get our financial house in order. Even more encouraging is the grass roots revolt over the 1958 budget. However, even if the budget is slashed, the cold probabilities are that Congress won't save enough money to provide for *both* debt reduction and tax cuts.

There is no question that taxes are too heavy. But in an uncertain world we also need to rebuild a reserve of borrowing power. As things stand now any emergency would find the public debt near World War II peak levels and the economy already flooded with Treasury issues. Debt reduction could create needed room for emergency borrowing. As Senator Byrd has said: "if we cannot . . . reduce the debt in peace and better-than-normal prosperity, when can it be done?"

If a choice has to be made between tax cuts and debt reduction, President Eisenhower is on record:

". . . by no means do I believe they should cut taxes until we have made some little start on reducing the enormous national debt. There is such a thing as fiscal integrity; I don't care whether it is an individual or a nation."

There are indications that many people agree with the President, despite the wider publicity given to demands for tax cuts.

Apart from marking a return to fiscal responsibility, debt reduction will have immediate benefits for the Treasury debt managers. It will reduce the number of dollars the Treasury has to pay high interest rates on and thus help to hold down the cost of carrying the debt. At the same time it will return funds to the capital market for use by other borrowers, relieving strain with a natural easing effect on the level of interest rates. This, rather than watering down the value of the dollar by credit inflation, is the way to solve the Treasury's public debt problems. —END

Coming Mergers in the Movies

(*Continued from page* 339)

strengthen both organizations. Then, if both mergers actually come off, as is rumored in the film colony, the stage will be set for the truly grand finale – a super merger of Loew's-Twentieth Century and Warner-United Artists, providing the entire plot can get past the Anti-Trust censors of the Justice Department.

Where will all this leave the rest of the industry? There is no evidence to suppose that additional marriages have been proposed, but a massive combine such as the one described would be likely to bring retaliatory action from the other film majors. Both Columbia and Paramount have extremely valuable producing facilities and distribution franchises. Columbia, under the Screen Gems label is a leading film producer for TV, while Paramount has become well ensconced through its part ownership of the Allen B. Dumont Laboratories, the Dumont Broadcasting Co., Chromatic Television Laboratories, developer of the Lawrence color TV tube, and its primary interest in "pay" TV through its subsidiary, International Telemeter, which controls one of the three methods scheduled for trials by the F.C.C.

Universal Pictures, controlled by Decca Records is having its troubles, as indicated by the precipitous drop in earnings from $1.10 per share in the first 13 weeks of 1956 to 12¢ this year. Nevertheless, its strong ties with Decca, if ultimately combined with the other majors, would offer excellent diversification for a third force combine.

All in all, Hollywood should provide us with some thrillers in the near future, but whether the ending will be a happy one or not will have to await further unfolding of the plot. END

American Industry—In Search of New Stimuli for 1956

(*Continued from page* 330)

funds for reinvestment, and to permit them to write off old equipment made obsolescent by research, either higher write-offs, based on shorter life-spans of existing equipment, or more realistic "replacement" type depreciation accounting would be required. In the absence of such changes in tax law, it is altogether possible that the research effort will contribute little to national growth over the short term.

Revitalizing the Consumer Market

Research and development produces new consumer products, as well as new productive technology. But here too a financing problem exists. To effectuate the demand for the flow of new products likely to materialize over the next few years, a substantial cut in personal taxes is required. The cut should be large enough, and distributed broadly enough, to free income for major new purchases in durables lines where new or greatly improved products are already on drawing boards, or approaching mass production.

It is perhaps worth noting here that tax reductions for individuals, and changes in depreciation laws for business (which amount to a tax cut in terms of their effects on federal revenues) necessitate stability in federal government spending. The emphasis now appearing on the subject of cutting the federal budget is, in fact, a belated recognition, on the part of businessmen and many legislators, that the private sector of American business now urgently requires a new injection of purchasing power to maintain its growth, and that tax reduction—which is a transfer of purchasing power from the public to the private sector—is the best and certainly the quickest way of achieving this injection.

The Export Market

For an almost inexhaustible range of light and heavy manufactured products, the American economy is still the world's most efficient producer. Many of these products – even automobiles can serve as an example—are in tragically short *world* supply. Activating this hungry world market should be a major objective of American policy, for without such deliberate effort, common markets are likely to shrink our exports at the very time when we have a growing abundance of capacity to serve the world.

But with exports, as with consumption and investment, demand requires financing in order to be effective, and financing world demand presents an acute political as well as monetary problem. In fact, the current rate of exports is likely to encounter grave financing difficulties even by year end.

What is needed here is an imaginative national approach to the problem of bringing America's rapidly growing capacity to the world market. To the extent that this can be done through resort to private capital, the benefits would be large and unqualified; but where public capital is required properly chosen opportunities could still more than justify its use.

For what is described here is essentially an interim adjustment in the long-term growth of the American economy—a period during which American capacity has gained the upper hand over national demand. To weather this adjustment, an intelligent series of stimulants to business investment, personal consumption, and the world market is at least desirable, and may well turn out to be essential.

General Dynamics

(*Continued from page* 333)

money, effort, and time has been spent on research, and the scope of future study is without limit. The actual application of nuclear energy has thus far been concentrated on the building of the submarine "Nautilus" and her sister ships, which have attracted great attention as a tangible form of what controlled nuclear fission can produce for mankind. General Dynamics, through the precursor Electric Boat division, coordinated the assembling of the "Nautilus" at Groton, Connecticut.

It was the vision of Hopkins that foresaw the metamorphosis of an oil-fired Navy into an atomic-powered Navy. The submarine was an appropriate first choice, since (a) the problem of fueling submarines away from the home port is difficult in war time, and (b) once engineered for a submarine, a reactor can be applied to other craft with less rigid requirements and specifications. Doubtless, there will be many minor changes in the reactors. The 'Seawolf' (second nuclear submarine) has a nuclear plant slightly different from the "Nautilus". The "Skipjack" is now on the ways, and others are either on order or in prospect. There are plans for a 5,400 ton submarine with twin reactors, and a huge underwater troop and cargo transport is in contemplation. There are varying estimates of how large and how quickly an atomic fleet of submarines, destroyers, carriers and transports is to be built. Suffice it to say that almost every Naval craft is a candidate for replacement by an atomic powered ship.

Electric Motors

Allied with its shipbuilding interests is the *Electro Dynamics Division* in Bayonne, New Jersey. About half of the AC and DC motors produced are supplied to the Navy. Motors ranging in size from 10 to 400 horsepower are offered commercially for pumps, air conditioning machinery, shipboard equipment and other purposes. The Electro Dynamic Division has also pioneered "Selectron" and "Selectrol", which are automatic control systems. The prospect for this division is probable diversification into further branches of electric propulsion, many of them complementary to other General Dynamics projects.

Electronics Center

General Dynamics enhanced its growing position in electronics by acquiring Stromberg-Carlson in 1955. The principal products are telephone switchboards, sound equipment, and a broad line of special components and assemblies. Physical capacity has been potentially doubled by expansion, including the purchase of an almost-new factory building in Rochester, N. Y. Typical of the recently offered products is

"Charactron", an amazing "shaped-beam tube" capable of transposing 1.2 million words or numbers per minute. Such a device has great significance for industrial computers and the graphic arts. The "Pagemaster" a high capacity paging system, the "Digimatic" provides a tape control for precision machine tools, and the "Microwave" can "stack" a large number of messages for transmission or reception. The new Electronics Center is engaged in nuclear and guided missile instrumentation, and certain contracts involve the famous "Tacan" navigational system. The "XY" switchboard is fully transistorized and can handle multitudes of circuits. The Center is entering the field of "xerography" (dry copying) on Haloid and Horizon's patents, and a new Cathode-ray tube division has been initiated.

It is interesting and significant that these revolutionary developments are actualities rather than mere projects in the laboratory. To bolster the electronics division, there are ample funds for research, the excellent trade name of General Dynamics, a wide market wholly within the organization, and a rapidly developing market in commerce and industry.

Research

The key to future sales in General Dynamics, as well as in any company exploring new horizons of science, must be smoothly fitted with the acumen and success of the research department. Like other organizations, General Dynamics relies on the efforts of central research as well as on field research, which is often so closely tied in with product engineering and development as to be indistinguishable. Last year, the Electric Boat Division opened its new Robinson Research and Development Center, and work is progressing on a new research and administration center at the Rochester, N. Y., Stromberg-Carlson Electronics Division. A trisonic wind tunnel, studies on speeds above Mach 2, and new buildings and equipment are under way for the Astronautics Division. The greatest of all these projects is the new John Jay Hopkins Laboratory for Pure and Applied Science at the General Atomics Division at LaJolla, California, which will have a research reactor among its extensive equipment. General Dynamics spends more than the average company on research and is expecting to spend even greater sums in the future. As a guide to the size of the research operations, over 10,000 graduate engineers and scientists are employed.

New Directions In Management

A distinguishing feature is the so-called "systems" form of management. Each division operates more or less autonomously aided by top-level management representing research, finance, accounting, legal and other departments with broad scope. The fifteen man Board of Directors, recently reduced from thirty, is supplemented by a Board of Management, made up of division and staff heads, and a Board of Consultants, composed of experts in various scientific and business fields. This arrangement produces excellent flexibility and, in fact, has been emulated by other diversified growth corporations. Frank Pace, Jr., has become the new president, succeeding the late Mr. Hopkins. Mr. Earl D. Johnson, former senior vice-president of operations and fiscal affairs, has been made executive vice-president. Mr. L. J. Gross has become the Treasurer.

Financial Details

The needs for cash resources for a vast organization such as General Dynamics are all the more necessary in view of the heavy research and construction programs. As of December 31, 1956, the company reported its cash position at $39 million, which was slightly below the figure a year previous. Net current assets were $133 million, equivalent to slightly over $17 per common share. Inventories increased from $80 million during 1955 to $158 million during 1956. The turnover of inventory during 1956 and 1955 was relatively rapid, which is a favorable factor.

The flow of cash was supplied by retained earnings of about $19 million, the exercise of stock options of about $3.8 million and depreciation of $7.3 million. Loans from banks were equal to $10 million. Other funds were obtained from customers' deposits (commercial aircraft, for example) and other contract advances, together a total of about $40 million. These funds accommodated capital expenditures which were $27 million in 1956.

The fixed assets, including land, buildings and machinery, are valued at $103 million and have been depreciated to the extent of about 45%. (The Book Value of the company was reported at $18.40.) During 1956, the Stromberg-Carlson Broadcasting Corp. was sold at a profit of $2.2 million, which was included in reported net income.

Debt consists of $39.8 million of 3½% debentures, due in 1975, and convertible into common stock at a price of $49.46 per share. In view of the small yield of 2.8%, there have been some conversions in the meantime to take advantage of the slightly higher yield on the common. The bonds and stock sell at a price about equal to conversion. Other debt includes a $7.6 million note to the Canadian Government in connection with Canadair and a $4.7 million mortgage on the Stromberg-Carlson plant. Interest costs were $2.6 million last year, which is relatively minor.

The common stock of $1 par value was split 2 for 1 in 1955, and a stock dividend in 1956 created 3 new shares for each existing 2 shares. The current market value of the common stock is about $475 million, compared with sales volume in excess of $1 billion and assets of $435 million.

Dividends have been paid continuously for 21 years and have been increased annually since 1951. The current rate is 50¢ quarterly, providing a yield of 3.3%.

It is of eye-catching interest that the stockholders recently were asked to approve the authorization of 30 million shares, a 50% increase over the former number of shares authorized. The resultant possible purchasing power of over a billion dollars should permit leeway for future financing or acquisition of property.

Financially Successful Operations

A strong and growing line of products, excellent research and ample finances are to be found at General Dynamics. In addition, profitability has been above-average, taking into consideration the

fact that a great proportion of the company's sales are and have been dependent upon low-margin Government contracts. In 1956, the company reported figures indicating that costs represented about 94% of sales. The pretax operating margin of profit was 5.9%, which was slightly lower than the margins during 1955 and 1954, but well above the average margin during the years immediately preceding 1954. Taxes were accrued at near-normal rates.

Net worth of the company has steadily increased from year to year, and this is a favorable indication that the company is building up its assets and earning power. Net worth per share has also improved, showing that the underlying value of the stock has been increased. The return of income on net worth and invested capital has been entirely satisfactory, showing that the company's resources have been well employed.

Appraising The Stock

It would be a simplification to say that the future of General Dynamics should be as well assured as the future of aircraft, guided missiles, electronics and nuclear energy applications. Even the rankest pessimist would have to agree that these product groups are still in relative infancy. It appears that General Dynamics already occupies a significantly important stake in each of these groups.

To take advantage of modern technology and scientific discoveries, the research program must be an important element. Certainly General Dynamics qualifies, and it can be said that many of its present products owe their existence wholly to research.

In order to grow, a company such as General Dynamics must have adequate financial and earnings resources. The record clearly shows that the company has been able to develop consistent profits and has continuously built up both its liquid and fixed asset position.

The two factors which may have the greatest bearing on the near term course of the stock appear to be (1) management and (2) outlook for military orders. The new president apparently has excellent capabilities and a brilliant record. However, one must regard his initiation in the leadership of this complex group of companies as a "test run". In all probability, he will develop the company in the same spirit as his predecessor, who was worshipped as the guiding light. However, investors tend to shy away from corporations which go through an important change of management, at least until the new group has become seasoned by the test of some unusual series of incidents or the repercussions of a business downturn.

As regards military business, investors tend to devote much attention to the psychology of war vs. peace. In the long run, peace usually proves to be "bullish", but a stretch-out or decline of military orders to industry can prove to be adverse. For the time being, it would appear that General Dynamics is amply fortified with military orders, and its civilian business appears to be promising.

It is certain that General Dynamics is well aware of the problem of depending too heavily on Government business and that great efforts are being expended to develop industrial and commercial products, such as airplanes, electronics and nuclear devices for civilian uses. The clues to watch are how fast and how well these non-military products are able to develop.

General Dynamics shares are currently at 59½, down from their 1957 high of 68⅝, due primarily to pressure generated by continuing news in regard to Congressional efforts to reduce defense spending—and to disarmament talks. Steps towards disarmament, if agreed upon, will be very gradual and take some time. Therefore, while near-term unsettlement is likely if military orders were to be cut back, the long-pull outlook for the stock is promising. END

As I See It!

(*Continued from page* 325)

reunification of Germany. While he has apparently secured President Eisenhower's agreement to this plan, the concurrence of the Russian leaders is the essential ingredient, and this would necessitate a sharp reversal of their previous stand. In any event disarmament negotiations will be lengthy and any first steps to disarm will be gradual. It must be kept in mind, too, that any flare-up of trouble in the Middle East, China or any of the other explosive areas of the world, could knock the whole disarmament picture into a cocked hat. In view of past lessons — hard learned lessons — a break from our national policy centered on powerful air defense and retaliatory power is unlikely. END

For Profit and Income

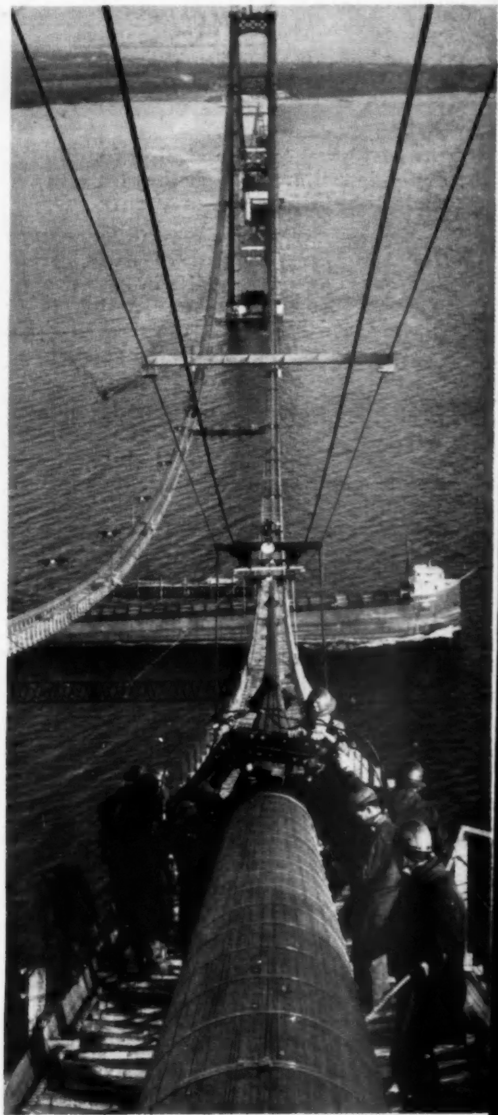
(*Continued from page* 357)

in the stock in our April 27 issue—it was around 39 when the comment was written and nearer 43 when readers got the Magazine — we expected 1957 net around $3 a share. A gain of 40%-50% would compare with 23.6% in 1956 and 21.5% in 1955, which would be a decided speed-up which very few growth stocks will come anywhere near matching this year. We continue to like this stock, now at 49, for long-range buying.

Air Reduction

Last year's profit of this well-situated company gained about 30%, from $3.21 a share to $4.19. Present indications suggest a further gain in the vicinity of 20%-25% this year, or to around $5 or more a share. Around 58, priced at roughly 11 times likely earnings, yielding 4.3% on a $2.50 dividend, which was recently raised from $2, the stock is still a sound buy.

Only STEEL can do so many jobs so well



Stainless Steel Porcupine. This ferocious-looking machine bristles with Stainless Steel spikes, and for a good reason, too. It's the main drive compressor for a supersonic wind tunnel at the National Advisory Committee for Aeronautics' Lewis Flight Propulsion Laboratory in Cleveland. It delivers a ton of air per second at a velocity of 1200 to 1800 miles per hour! The tunnel will test full-size turbojet and ramjet engines.

It's Mowing Time Again. And a clean-cutting all-steel rotary power mower like this can help you do the job faster and with less work. The all-steel deck is tough and unbreakable. The mower blade is steel, too, because steel is the only commercial metal that will take and hold a keen cutting edge.

41,000 Miles Of Wire. This picture was taken o the world-famous Mackinac Bridge, now under con struction by American Bridge Division of Unite States Steel. The all-important main suspensio cables contain 41,000 miles of $\frac{3}{16}$-inch-diameter tough galvanized steel wire supplied by American Steel & Wire Division. The cables are laid four wires at a time by a traveling "spinning wheel." Each cable i over two feet in diameter and contains 12,580 wires

UNITED STATES STEEL

USS

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